

S A. & S., Ltd.—22/7/1935.

79

C.P. 1935-1936.

1935.

**HERTFORDSHIRE COUNTY COUNCIL.**

---

**THIRTY-SIXTH ANNUAL REPORT ON THE**

**PUBLIC HEALTH**

**OF**

**HERTFORDSHIRE**

**BEING THAT FOR THE YEAR**

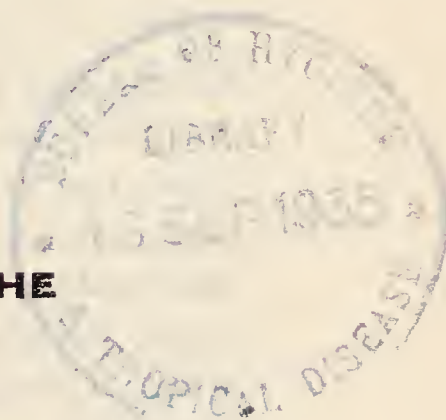
**1934**

**BY**

**H. HYSLOP THOMSON**

**M.D., D.P.H.**

**County Medical Officer of Health.**



## CONTENTS.

	PAGE
Introductory Letter . . . . .	3
Statistical Summary . . . . .	5
Population and Acreage . . . . .	6
Birth-rate . . . . .	6
Death-rate . . . . .	7
Infant Mortality . . . . .	7
Maternal Mortality . . . . .	8
Cancer . . . . .	10
Tuberculosis . . . . .	11
Venereal Diseases . . . . .	19
Blind Persons . . . . .	21
Mental Deficiency . . . . .	24
Public Assistance and Public Health . . . . .	27
Epidemic Diseases . . . . .	30
Chief Statistics of Urban and Rural Districts . . . . .	<i>facing</i> 34
Isolation Hospitals . . . . .	34
Bacteriological Examinations . . . . .	37
Public Vaccination . . . . .	40
Nursing Homes . . . . .	41
Maternity and Child Welfare . . . . .	42
Health Visitors, Nurses, and Midwives . . . . .	52
Report of Inspector of Midwives and County Health Visitor . . . . .	53
Sanitary Services in the County . . . . .	57
Milk Production : Scheme of Accredited Producers . . . . .	73
Disposal of House-refuse ; Dumps . . . . .	74
Sale of Food & Drugs Acts . . . . .	75
Summary and Conclusions . . . . .	78

**To the Chairman and Members of  
the Public Health and Housing Committee.**

LADIES AND GENTLEMEN,

I have the honour of presenting to you the Annual Report on the Public Health of the County during the year 1934, being the thirty-sixth you have received.

The statistics for the year indicate that during 1934 a satisfactory standard of health was maintained in the County. It will be observed that the birth-rate is higher and the death-rate lower and that the infant mortality and the death-rate from pulmonary tuberculosis for the year are the lowest figures which have so far been attained in the County. The maternal mortality shows a slight increase but apart from this and an increase in the number of deaths from malignant disease and heart disease which is almost inevitable, the statistics may be regarded as satisfactory.

In the Summary and Conclusions given at the end of the Report reference will be found to various questions of importance to which special attention was directed during the year.

I am, Ladies and Gentlemen,

Your obedient servant,

H. HYSLOP THOMSON,

*County Medical Officer of Health.*

HERTFORD.



## *Members of the Public Health and Housing Committee.*

Chairman : H. E. Fern.

Anderson, H.	Frankin, E. J.
Attenborough, Mrs. G. E.	Goddard, S. J.
Ball, G.	*Goulding, A.
Barratt, S. G. R.	Grimwood, T. R.
Bartleet, A. R.	Halsey, C. H.
*Blount, Miss M. B.	Hargreaves, A. A.
*Bradford, Miss E. E. R.	Haslam, R. H., Capt.
Bridger, H. J.	Lindgren, G. S.
Bromet, A.	Lucas, Major-Gen. C. H. Tindall,
Bushby, G. H.	C.B., C.M.G., D.S.O.
Cannon, H.	Mitchell, P. G.
Clark, T. R.	Ordish, G. H.
Craufurd, Col. R. Q., D.S.O.	Rutherford, D. C.
Curtis, H. E.	*Smith, Rev. Roland.
*Dockray, Dr. J. S.	Slade, E. H.
Faudel-Phillips, Sir L., Bart.	*Stacey, W.
*Fern, H. E. (Chairman).	Vialou, A. B.
Fletcher, H.	Wallace, A.
Fordham, Mrs. P.	

Those marked \* are members of the Sub-Committee as to County Medical Officer of Health's Reports.

### *District Medical Officers of Health.*

<i>Name and Address.</i>	<i>District.</i>
Clarke, Dr. A. E., Council Offices, Rickmansworth.	Rickmansworth Urban.
Collins, Dr. E., The Elms, Sawbridgeworth.	Sawbridgeworth Urban.
Cox, Dr. W. J., Public Health Department, Watford.	Borough of Watford.
Fraser, Dr. H., Westlands, Harpenden.	Harpenden Urban.
Grattan, Dr. H. W., Public Health Department, Welwyn Garden City.	Welwyn Garden City Urban ; Hatfield and Welwyn Rural.
Gross, Dr. M., Town Hall, Hemel Hempstead.	Borough of Hemel Hempstead Berkhampstead and Tring Urban ; Berkhampstead and Hemel Hempstead Rural.
Grosvenor, Dr. A. A., Bowling Green, Stevenage.	Stevenage Urban.
Hardie, Dr. C. F., Wood Street, Barnet.	Barnet Urban and Rural.
Harvey, Dr. W., 25 King Street, Watford.	Bushey and Chorleywood Urban ; Watford Rural.
Macfadyen, Dr. N., 123 Norton Way, Letchworth.	Hitchin and Royston Urban ; Ashwell and Hitchin Rural.
McClymont, Dr. J., Clay Hill, Enfield.	Cheshunt Urban.
Paton, Dr. R. R. K., 36 St. Peter's Street, St. Albans.	City of St. Alban ; St. Albans Rural.
Rose, Dr. A. E., Council Offices, New Barnet.	East Barnet Valley Urban.
Suggit, Dr. B., Hitchin Street, Baldock.	Baldock and Letchworth Urban.
Whitelaw, Dr. A. D., The Castle, Hertford.	Borough of Hertford ; Bishop's Stortford, Hoddesdon, and Ware Urban ; Buntingford, Hadham, Hertford and Ware Rural.



# THE HEALTH OF THE COUNTY, 1934.

TABLE I.  
*STATISTICAL SUMMARY.*  
(For each District see Table 18.)

	URBAN.			RURAL.			COUNTY.		
	1934. <i>a</i>	1933. <i>b</i>	10 years † <i>c</i>	1934. <i>d</i>	1933. <i>e</i>	10 years † <i>f</i>	1934. <i>g</i>	1933. <i>h</i>	10 years † <i>i</i>
I. Population	299,300	293,900	246,245	130,050	127,300	111,265	429,350	421,200	366,132
II. Birth-rate ...	13·8	13·6	16·1	13·9	13·5	14·8	13·8	13·6	15·9
III. Death-rate	10·6	10·8	10·4	10·1	10·7	10·3	10·4	10·8	10·4
IV. Infant Mor- tality *	40	44	46	33	37	45	37	42	47
V. Epidemic Death-rate	·14	·17	—	·21	·16	—	·16	·16	—
VI. Phthisis Death-rate	·54	·55	·6	·33	·47	·5	·47	·53	·5
VII. Cancer Death-rate	1·7	1·3	1·4	1·4	1·3	1·3	1·6	1·3	1·3

† 1921-1930.

\* Per 1,000 Births.

The above figures give a summary of the vital statistics for the County during 1934. The estimated population for the year was 429,350, compared with 421,200 for last year. A study of the above table shows that there is a decrease in the general death-rate, namely 10·4, compared with 10·8 for the previous year. The birth-rate is slightly higher, being 13·8 compared with 13·6 for the previous year. There is a further fall in the infant mortality, which has reached the figure of 37; this is the lowest which has so far been attained, the previous lowest being 42 in 1933 and 1924.

There is a slight rise in the maternal mortality, which was 3·6 compared with 3·4 last year. There is a further fall in the death-rate from pulmonary tuberculosis, namely 0·47 compared with 0·53 for 1933. This is the lowest death-rate from this disease which has so far been reached. The death-rate from non-pulmonary tuberculosis is also lower, namely 0·09 compared with 0·10 last year. There is no increase in the epidemic death-rate, which was 0·16, the same as for the previous year. The death-rate from malignant disease shows an increase, being 1·6 compared with 1·3 in 1933.



**TABLE 2.**  
**POPULATION AND ACREAGE.**

(For each District see Table 18.)

	Acreage (land and water).	POPULATION.			
		Census 1911.	Census 1921.	Census 1931.	Estimate 1934.
Urban Districts ...	70,048	194,263	229,059	280,945	299,300
Rural Districts ...	334,472	117,058	104,136	120,214	130,050
<b>County ...</b>	<b>404,520</b>	<b>311,321</b>	<b>333,195</b>	<b>401,159</b>	<b>429,350</b>
England & Wales ...	37,339,215	36,070,492	37,885,242	39,947,931	—

The 1931 census population for the County was 401,159, the population estimated for 1933 was 421,200, and the estimated population for 1934 was 429,350, which is an increase of 8,150.

**TABLE 3.**  
**BIRTH-RATE.**

(For each District see Table 18. For number of births, legitimate and illegitimate, in each district, see Table 27.)

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	18·0	3,971*	18·2	2,003*	18·1	5,974*	21·8
1921-30 .	16·1	3,939*	14·8	1,739*	15·9	5,678*	18·3
1933 .	13·6	4,013	13·5	1,722	13·6	5,735	14·4
1934 .	13·8	4,135	13·9	1,812	13·8	5,947	14·8

\* = Average.

The birth-rate for 1934 has slightly increased, being 13·8 compared with 13·6 for 1933; the rate for the urban districts is 13·8 and for the rural 13·9, the birth-rate in the rural districts showing the greater increase. The highest birth-rate in the urban districts was 20·2 (Welwyn Garden City), which was also the highest last year, and the lowest 8·9 (Harpenden). In the rural districts the highest birth-rate was 18·2 (Barnet), which was the highest last year, and the lowest 10·0 (Buntingford).

In three urban districts (Royston, Sawbridgeworth, and Tring) and in three rural districts (Berkhampstead, Buntingford, and Hertford) the death-rate exceeded the birth-rate.

TABLE 4.  
*DEATH-RATE.*

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	11·6	2,393*	11·6	1,221*	11·6	3,614*	14·3
1921-30 .	10·4	2,585*	10·3	1,145*	10·4	3,730*	11·8
1933 .	10·8	3,184	10·7	1,367	10·8	4,551	12·3
1934 .	10·6	3,183	10·1	1,322	10·4	4,505	11·8

\* = Average.

The death-rate shows a decrease for 1934, being 10·4 compared with 10·8 for the previous year. The death-rate was higher in the urban districts, 10·6 compared with 10·1 for the rural districts in which the decrease is most marked. The corrected death-rate as obtained by the figures supplied by the Registrar-General shows a further decrease for both urban and rural districts the rates being 10·0 and 9·2 respectively, and for the County 9·7 instead of 10·4. In the urban districts the highest death-rate was 14·4 (Sawbridgeworth) and the lowest 4·7 (Welwyn Garden City); these rates, if corrected, would be 11·9 and 5·9 respectively. In the rural districts the highest death-rate was 13·9 (Buntingford) and the lowest 8·3 (St. Albans); these rates if corrected would be 10·8 and 7·8 respectively.

The decrease in the death-rate during 1934 is chiefly due to a fall in the number of deaths from influenza, tuberculosis, pneumonia, bronchitis, whooping cough, and in a lower infant mortality.

TABLE 5.  
*INFANT MORTALITY.*

	Hertfordshire.						England. and Wales.
	Urban.		Rural.		County.		
	Rate.	Number.	Rate.	Number.	Rate.	Number.	Rate.
1911-20 .	67	259*	58	119*	64	378*	100
1921-30 .	46	192*	45	79*	47	271*	81
1933 .	44	179	37	64	42	243	64
1934 .	40	165	33	60	37	225	59

\* = Average.



The infant mortality, which is the number of deaths under twelve months per 1,000 births, shows a distinct fall from 42 to 37, the actual number of deaths being 225 compared with 243 for 1933; this decrease affects both urban and rural districts. This is the lowest infant mortality which has been reached so far, the previous lowest being 42. There were no deaths under the age of twelve months in the urban district of Tring. In the urban districts the lowest infant mortality was 15.7 (Welwyn Garden City) and in the rural districts 10.6 (Ware). It is satisfactory to note that there is a further fall in the number of deaths from congenital debility and premature birth which was 144 compared with 153 last year.

There has been a considerable decrease in the mortality amongst illegitimate infants, which was 76.9 during 1934, compared with 101.4 during 1933. The death-rate in the urban districts was 58.0 compared with 132.0 in the rural districts.

There were 11 deaths from diarrhoea under the age of twelve months compared with 18 last year. It is significant that notwithstanding the presence of a dry summer there should be such a marked fall in the number of deaths from diarrhoea. This emphasizes the value of the work which is being carried out at infant welfare centres and by other agencies to promote the welfare of infants.

For the prevention of epidemic diarrhoea in infants and young children efforts must be continued in the following directions: (1) The encouragement of the breast-feeding of infants, (2) the provision of a clean milk supply, (3) the attaining of a satisfactory standard of domiciliary cleanliness, (4) the abolition of refuse and flies, and (5) the protection of all milk in the home from contamination by dust and flies. The main precaution is cleanliness in regard to food utensils, food, and milk.

### *MATERNAL MORTALITY.*

#### NUMBER OF DEATHS OF MOTHERS PER 1,000 BIRTHS.

The number of maternal deaths during the year was 22, compared with 20 last year and 18 in 1932. The maternal mortality was 3.6 compared with 3.4 last year and 3.1 in 1932. Of the 22 maternal deaths 11 were due to puerperal sepsis and 11 were due to other accidents and diseases of pregnancy and parturition, compared with 8 and 12 respectively for last year. It will be observed that the increase is due to three additional deaths from puerperal sepsis, all in rural districts, the deaths from other causes being one less.

Thirteen of the 22 maternal deaths occurred in urban districts



and 9 in rural districts. Of the 11 deaths due to puerperal sepsis 7 occurred in urban districts and 4 in rural districts.

There were 24 cases of puerperal fever notified during the year, 20 from urban districts and 4 from rural districts. The largest number of cases notified from one district was 6 (Barnet Urban and Watford Borough).

There were 65 notifications of puerperal pyrexia received during the year compared with 43 last year, 50 from urban districts and 15 from rural districts.

During the year special consideration has been given to the question of maternal mortality, and a special report on the subject was submitted to the Maternity and Child Welfare Committee.

In considering the question of maternal mortality one is impressed by the fact that notwithstanding all that is being done there is no tendency for the rate to show a progressive decrease. The following are the rates for the county for each year since 1919: 3.5, 2.5, 2.3, 4.2, 2.9, 3.2, 3.2, 4.9, 2.2, 2.8, 4.2, 4.5, 3.8, 3.1, 3.4, 3.6. When one considers the organized efforts which are now made to safeguard the health of mothers before, during, and after confinement, one would expect such efforts to be reflected in a gradual decline in the maternal death-rate. The fact that this is not so suggests one of two causes: (a) The present schemes for maternal welfare are not on correct lines, or (b) that influences are at work which counteract the good effect of schemes for maternal welfare. Regarding the later point it is almost certain that failure in attempts at birth control and induced abortion, physical overstrain, and errors in diet must impair resistance to infection and retard recovery.

In order to improve still further the scheme of maternal welfare in the county the following steps have been taken: (a) Increasing knowledge as to facilities for ante-natal care and supervision; (b) increased facilities for the dental treatment of expectant mothers; (c) the appointment of a second consulting obstetrician; and (d) the adoption of a uniform aseptic technique for use in maternity units in the county.

The chief causes of maternal mortality are (a) sepsis, (b) toxæmia, and (c) hæmorrhage. To diminish maternal deaths consideration must be given to the following points: (1) Adequate ante-natal supervision; (2) the avoidance of haste and unnecessary interference in normal cases; and (3) the immediate expert treatment of complicated cases. It is also probable that the time has arrived when every death in child-birth should be subject to investigation by a coroner.

TABLE 6.  
*CANCER OR MALIGNANT DISEASE.*

(Including carcinoma and rodent ulcer. For each district see Table 18.)

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		Rate.
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	1.2	252*	1.2	128*	1.2	380*	1.2
1921-30 .	1.4	342*	1.3	151*	1.3	493*	1.2
1933 .	1.3	402	1.3	176	1.3	578	1.5
1934 .	1.7	511	1.4	194	1.6	705	—

\* = Average.

There has been an increase in the death-rate from malignant disease.

The total number of deaths from this disease during the year was 705, compared with 578 for the previous year, which gives a death-rate of 1.6 compared with 1.3. Of the total number of deaths 511 were in urban districts and 194 in rural districts, and 320 were males and 385 were females compared with 268 and 310 respectively last year. It will be observed that the increase in the death-rate from malignant disease is higher in the urban than in the rural districts.

A study of the sex incidence of the disease shows that the increase affects both males and females, the increase being for males 52 and for females 75. The increase in the death-rate from malignant disease is chiefly due to the larger number of persons who now reach the advanced age period when malignant disease, which is a disease predisposed to by degenerative changes, most frequently develops. Thus of the total deaths of 705 from this cause 392 were above the age of 65.

TABLE 7.  
*TUBERCULOSIS.*

CRUDE DEATH-RATES FROM PULMONARY TUBERCULOSIS.

(For each District see Table 18.)

	Hertfordshire.						England and Wales.
	Urban.		Rural.		County.		Rate.
	Rate.	Number.	Rate.	Number.	Rate.	Number.	
1911-20 .	.8	169*	.7	79*	.7	248*	1.0
1921-30 .	.6	158*	.5	63*	.5	221*	.7
1933 .	.55	163	.47	60	.53	223	.6
1934 .	.54	163	.33	43	.47	206	—

\* = Average.



The death-rate from pulmonary tuberculosis shows a definite decrease, being 0.47 compared with 0.53 for 1933; the decrease applying equally to both urban and rural districts. This is the lowest death-rate from pulmonary tuberculosis which has so far been reached, the previous lowest being 0.48 in 1931. There were no deaths from this disease in the urban district of Chorleywood and the rural districts of Ashwell and Welwyn. In the urban districts the highest death-rate was 0.89 (Hoddesdon, Tring, and Ware), and the lowest 0.18 (Hemel Hempstead). In the rural districts the highest death-rate was 0.72 (Barnet) and the lowest 0.13 (Hertford).

The number of cases of tuberculosis notified during the year was 523 compared with 620 for the previous year. Of the total number 407 were pulmonary cases and 116, compared with 140 last year, were non-pulmonary cases. In the following tables particulars are given of the number of cases notified and of the number of deaths from tuberculosis in the various urban and rural districts in the County.

Of the deaths from pulmonary tuberculosis 163 occurred in urban districts, the same as last year, and 43 in rural districts compared with 60. Of the total deaths 115 were males compared with 124 last year and 91 were females compared with 99, so that the decrease has been in the case of both sexes. In last year's report reference was made to the preponderance of deaths in females from this disease in the young adult age group 25-35 in urban districts. The figures have somewhat altered for 1934. In the urban districts deaths of females predominate in the age group 15-25 namely 17 to 8: in the age group 25-35 in the urban districts deaths of males are higher namely 27 to 22. In the rural districts in both these groups female deaths predominate, namely 4 to 2 and 9 to 8 respectively.

Of the deaths from non-pulmonary tuberculosis 25 occurred in urban districts compared with 29 last year and 15 in rural districts, compared with 17, so that there has been a decrease in both urban and rural districts. In twelve urban and four rural districts there have been no deaths from non-pulmonary tuberculosis. The death-rate from non-pulmonary tuberculosis is 0.09 compared with 0.1 last year. In urban districts the highest death-rate from this disease was 0.44 (Ware) and in rural districts 0.28 (Ashwell).

TABLE 8.

GIVING THE NOTIFICATION-RATE AND DEATH-RATE FROM NON-PULMONARY TUBERCULOSIS.

District.	Popula- tion.	Number of Cases Notified.			Number of Deaths.			Attack Rate per 1,000.	Death- rate per 1,000.
		M.	F.	Total.	M.	F.	Total.		
<i>Urban.</i>									
Baldock	3,381	1	—	1	—	—	—	.3	—
Barnet . . .	16,850	1	4	5	—	—	—	.29	—
Berkhampstead . .	8,477	—	2	2	—	—	—	.23	—
Bishop's Stortford .	10,400	—	1	1	—	—	—	.09	—
Bushey . . .	11,750	1	—	1	—	—	—	.08	—
Cheshunt . . .	15,320	3	1	4	1	—	1	.26	.06
Chorleywood . . .	3,395	—	1	1	—	—	—	.29	—
East Barnet Valley .	21,540	3	3	6	1	—	1	.27	.04
Harpenden . . .	9,160	1	1	2	—	—	—	.21	—
Hemel Hempstead .	15,940	4	1	5	4	—	4	.31	.25
Hertford . . .	12,290	—	—	—	1	2	3	—	.24
Hitchin . . .	15,220	3	3	6	1	—	1	.39	.06
Hoddesdon . . .	7,792	2	2	4	1	—	1	.51	.12
Letchworth. . .	14,390	3	1	4	—	—	—	.27	—
Rickmansworth . .	11,680	1	3	4	—	1	1	.34	.08
Royston . . .	3,781	—	1	1	—	—	—	.26	—
St. Albans . . .	30,980	3	4	7	2	3	5	.22	.16
Sawbridgeworth . .	2,840	—	—	—	1	—	1	—	.35
Stevenage . . .	5,696	1	2	3	—	—	—	.52	—
Tring . . .	4,488	—	—	—	—	—	—	—	—
Ware . . .	6,685	3	1	4	1	2	3	.59	.44
Watford . . .	57,800	10	14	24	2	2	4	.41	.07
Welwyn Gdn. City .	9,445	1	4	5	—	—	—	.52	—
Total Urban . . .	299,300	41	49	90	15	10	25	.30	.08
<i>Rural.</i>									
Ashwell . . .	3,546	—	—	—	—	1	1	—	.28
Barnet . . .	6,894	—	—	—	—	—	—	—	—
Berkhampstead . .	5,328	1	—	1	—	1	1	.18	.18
Buntingford . . .	4,581	—	—	—	—	—	—	—	—
Hadham . . .	5,476	—	1	1	—	—	—	.18	—
Hatfield . . .	12,610	2	2	4	1	2	3	.31	.24
Hemel Hempstead .	8,720	—	1	1	—	1	1	.11	.11
Hertford . . .	7,655	—	—	—	1	—	1	—	.13
Hitchin . . .	14,710	7	1	8	2	2	4	.54	.27
St. Albans . . .	21,670	1	4	5	1	—	1	.23	.04
Ware . . .	13,590	—	2	2	—	1	1	.14	.07
Watford . . .	21,230	2	1	3	1	1	2	.14	.09
Welwyn . . .	4,040	1	—	1	—	—	—	.24	—
Total Rural . . .	130,050	14	12	26	6	9	15	.19	.11
Total Urban. . .	299,300	41	49	90	15	10	25	.30	.08
Total Urban and Rural	429,350	55	61	116	21	19	40	.27	.09



TABLE 9.

GIVING PARTICULARS OF THE NOTIFICATION-RATE AND DEATH-RATE FROM PULMONARY TUBERCULOSIS.

District.	Popula- tion.	Number of Cases notified.			Number of Deaths.			Attack Rate per 1,000.	Death- rate per 1,000.
		M.	F.	Total.	M.	F.	Total.		
<i>Urban.</i>									
Baldock . . . . .	3,381	2	2	4	1	2	3	1.18	.88
Barnet . . . . .	16,850	6	6	12	5	3	8	.71	.47
Berkhampstead . . . . .	8,477	2	4	6	4	3	7	.70	.82
Bishop's Stortford . . . . .	10,400	7	5	12	3	2	5	1.15	.48
Bushey . . . . .	11,750	3	1	4	3	2	5	.34	.42
Cheshunt . . . . .	15,320	9	7	16	1	4	5	1.04	.32
Chorleywood . . . . .	3,395	1	1	2	—	—	—	.58	—
East Barnet Valley . . . . .	21,540	11	13	24	8	6	14	1.11	.64
Harpenden . . . . .	9,160	2	5	7	2	2	4	.76	.43
Hemel Hempstead . . . . .	15,940	7	7	14	1	2	3	.87	.18
Hertford . . . . .	12,290	1	7	8	2	5	7	.65	.56
Hitchin . . . . .	15,220	8	5	13	5	2	7	.85	.45
Hoddesdon . . . . .	7,792	4	5	9	5	2	7	1.15	.89
Letchworth . . . . .	14,390	8	5	13	6	1	7	.90	.48
Rickmansworth . . . . .	11,680	1	3	4	1	—	1	.34	.08
Royston . . . . .	3,781	1	—	1	2	—	2	.26	.52
St. Albans . . . . .	30,980	19	23	42	9	9	18	1.34	.58
Sawbridgeworth . . . . .	2,840	—	1	1	1	1	2	.35	.70
Stevenage . . . . .	5,696	2	1	3	2	—	2	.52	.35
Tring . . . . .	4,488	2	1	3	3	1	4	.66	.89
Ware . . . . .	6,685	8	2	10	5	1	6	1.49	.89
Watford . . . . .	57,800	63	34	97	25	18	43	1.67	.74
Welwyn Garden City . . . . .	9,445	7	3	10	2	1	3	1.05	.31
Total Urban . . . . .	299,300	174	141	315	96	67	163	1.05	.54
<i>Rural.</i>									
Ashwell . . . . .	3,546	—	—	—	—	—	—	—	—
Barnet . . . . .	6,894	4	3	7	1	4	5	1.01	.72
Berkhampstead . . . . .	5,328	2	5	7	2	1	3	1.31	.56
Buntingford . . . . .	4,581	6	—	6	—	1	1	1.30	.21
Hadham . . . . .	5,476	2	1	3	—	2	2	.54	.36
Hatfield . . . . .	12,610	7	6	13	3	1	4	1.03	.31
Hemel Hempstead . . . . .	8,720	1	4	5	—	3	3	.57	.34
Hertford . . . . .	7,655	1	1	2	—	1	1	.26	.13
Hitchin . . . . .	14,710	7	3	10	3	1	4	.67	.27
St. Albans . . . . .	21,670	13	11	24	4	5	9	1.10	.41
Ware . . . . .	13,590	5	1	6	4	2	6	.44	.44
Watford . . . . .	21,230	5	2	7	2	3	5	.32	.23
Welwyn . . . . .	4,040	1	1	2	—	—	—	.49	—
Total Rural . . . . .	130,050	54	38	92	19	24	43	.70	.33
Total Urban . . . . .	299,300	174	141	315	96	67	163	1.05	.54
Total Urban and Rural . . . . .	429,350	228	179	407	115	91	206	.94	.47

*Preventive Measures.*—In previous reports reference has been made to the preventive measures which are essential for the control of tuberculosis, and there is little that remains to be said in this direction. Very definite advance has been and is being made in the provision of new houses and in improved home conditions. Legislation which will confer power to control and to prevent overcrowding will result in the further improvement of home conditions. Greater attention is now being directed to the quality and quantity of food which is an essential factor in protecting against attack by the tubercle bacillus. In this connection reference may be made to the improvement resulting in the nutrition of school children as a result of the schemes which have been provided for the provision of milk at reduced cost.

Further progress has been made during the year to improve the standard of milk in the county and there is now a scheme for accredited Grade "A" Producers which will result in a higher standard of milk being available. Milk is frequently examined for tubercle bacilli and all milk supplied to schools under the scheme is examined for bacterial count, *B. coli* and tubercle bacilli. Examination of bulk milk only rarely shows the presence of tubercle bacilli but this is due chiefly to the care which is exercised in carrying out clinical examination and in excluding the milk from suspected animals. During the period from 1st January, 1934, to 30th April, 1935, the number of samples of milk examined for tubercle bacilli was 281, of this 273 were negative and 8 were positive, and of these one only was from a bulk sample, 6 were from single cow milk, and in one the origin was uncertain.

The following steps are taken with a view to closer co-operation in preventive effort between the County Council and Local Sanitary Authorities. Information of all cases of pulmonary tuberculosis with tubercle bacilli in the sputum is sent to the District Medical Officer of Health. This supplements the information from notification and provides more accurate information regarding open cases of the disease.

Information is sent to the District Medical Officer of Health regarding the death of a patient and of removal of a patient to hospital or sanatorium so that disinfection may be carried out. The reports regarding the home conditions of patients forwarded by the health visitors and nurses contain from time to time references to insanitary conditions, structural defects, overcrowding, etc. The information thus obtained is forwarded to the District Medical Officer of Health with a request



that such action may be taken as may be considered necessary.

With a view to securing the co-operation of the Medical Practitioner a special form is sent giving particulars regarding the result of examination by the Tuberculosis Officer, the result of the examination of the sputum, and the treatment which has been recommended. Subsequent reports giving particulars of any special alteration in treatment are also sent.

During the year 340 home conditions forms were forwarded by the Health Visitors, from which the following particulars have been obtained.

TABLE 10.  
HOME CONDITIONS.

	Good.	Indifferent.	Bad.
Insured ... ..	86·9	9·9	3·2
Uninsured ... ..	74·5	20·8	4·7
Total ... ..	81·5	14·7	3·8

NUMBER OF PERSONS PER BEDROOM.

	Two or less.	Three.	Four.	Over Four.
Insured ... ..	89·0	8·9	2·1	—
Uninsured ... ..	84·5	10·1	4·1	1·3
Total ... ..	86·9	9·5	3·0	0·6

*Examination of Patients.*—During the year 1,039 persons were examined, compared with 956 last year, with a view to diagnosis and, if necessary, treatment. The results found on examination were as follows: Pulmonary or root tuberculosis, 327; non-pulmonary tuberculosis, 75; combined pulmonary and non-pulmonary tuberculosis, 5; suspect, 79; not tuberculosis, 553. The figure of persons examined includes a number of contacts of which particulars of 150 have been received. A number of contacts were also examined by medical practitioners in the County.

In cases in which the diagnosis is doubtful patients are admitted to the County Sanatorium for a period of observation. During the year 47 cases were admitted to the Sanatorium for this purpose.

*Treatment.* — This comprises sanatorium treatment for pulmonary cases, hospital treatment for non-pulmonary cases, dispensary treatment for ambulant cases, and domiciliary treatment for patients who, owing to their condition, have to be treated in their homes. In addition, cases of tuberculosis of the skin are sent to the London Hospital for light treatment. During the year 416 patients were admitted to sanatoria and hospitals for treatment and observation. At the end of the year 197 patients were under treatment or observation in these institutions. In addition to these there were admitted to Public Assistance Institutions 92 patients, of whom 73 were suffering from pulmonary tuberculosis; 61 patients were discharged from such institutions during the year. At the end of the year there were 23 patients in Public Assistance institutions of whom 19 were suffering from pulmonary tuberculosis.

Dr. Sharpe, Medical Superintendent of the County Sanatorium, reports that during the year 320 patients were admitted and that in 325 patients a term of treatment was completed. Of these 223 had improved, 25 had not improved, 47 had died, and in 30 the diagnosis was not confirmed.

The condition of the patients admitted to the Sanatorium during the year was as follows: Early stage, 23; intermediate stage, 152; advanced stage, 98; suspects, 42; surgical, 4; and glands, 1.

The results obtained during the year are shown as follows: Able to work or improved, 223; not improved, 18; worse, 7; diagnosis not confirmed, 30; died, 47.

Of the cases admitted in 171 the sputum was positive and 149 the sputum was negative.

The daily average number of beds occupied during the year was 132.

Twenty-two patients were transferred from the County Sanatorium to various institutions for the treatment of various complications or for other reasons: 12 to Hertford County Hospital, 1 to Church Army Sanatorium, 1 to Mid-Herts Hospital, St. Albans, 1 to University College Hospital, and 7 to Public Assistance Institutions.

In addition to the ordinary conservative regime the following figures give some particulars of various forms of treatment employed: Tuberculin, 86 patients received injections of



TABLE II.

RETURN SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF PATIENTS AND OF OBSERVATION OF DOUBTFUL CASES DISCHARGED FROM RESIDENTIAL INSTITUTIONS DURING THE YEAR 1934.

Classification on admission to the Institution.	Condition at time of discharge.	Duration of Residential Treatment in the Institution.												Total.	
		Under 3 months			3-6 months			6-12 months			More than 12 months				
		M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.		
PULMONARY TUBERCULOSIS.		Class T.B. minus.	Quiescent . . . . . Not Quiescent . . . . . Died in Institution	- 11 -	- 15 -	- - -	- 25 -	- 24 1	3 8 -	- 5 -	- 8 -	9 7 -	- 2 -	- - -	12 105 1
		Class T.B. plus Group 1.	Quiescent . . . . . Not Quiescent . . . . . Died in Institution	- 2 -	- - -	- - -	- 6 -	- 4 -	- - -	- 3 -	- 1 1	- 1 -	- - -	- - -	- 17 1
		Class T.B. plus Group 2.	Quiescent . . . . . Not Quiescent . . . . . Died in Institution	- 9 5	- 5 4	- - -	- 20 1	- 8 2	- - -	- 13 3	- 8 2	- - -	- 8 3	- 2 -	- 73 20
		Class T.B. plus Group 3.	Quiescent . . . . . Not Quiescent . . . . . Died in Institution	- 3 5	- 4 4	- - -	- 17 -	- 7 3	- - -	- 7 4	- 5 1	- - -	- 5 2	- 4 -	- 52 19
Non-PULMONARY TUBERCULOSIS.		Bones & Joints.	Quiescent . . . . . Not Quiescent . . . . . Died in Institution	- 2 -	1 - -	- 1 -	- - -	- - 1	2 - -	1 1 -	- 1 -	1 1 1	2 1 -	- 1 1	4 9 3
		Ab- dominal.	Quiescent . . . . . Not Quiescent . . . . . Died in Institution	- - -	1 4 -	- 1 -	- - -	- 3 -	1 - -	- - -	- - -	- - -	- - -	- - -	2 8 -
		Other Organs.	Quiescent . . . . . Not Quiescent . . . . . Died in Institution	- 2 -	- 1 -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- 1 -	- - -	- 4 -
		Peripheral Glands.	Quiescent . . . . . Not Quiescent . . . . . Died in Institution	1 - -	- 1 -	1 4 -	- - -	- - -	1 - -	- - -	- - -	2 - -	- - -	- - -	6 5 -
		PULMONARY.						NON-PULMONARY.							
		Under 4 weeks			Over 4 weeks			Under 4 weeks			Over 4 weeks				
Obser- vation for purpose of diagnosis.	Tuberculous . . . . . Non-tuberculous . . . . . Doubtful . . . . .	7 10 -	6 20 -	- - -	- - -	- - -	- - -	- - -	- - -	1 3 -	- 2 -	- 3 -	- 1 -	- 1 -	14 40 -

Particulars of patients who were under treatment in institutions for less than 28 days do not appear in this table.

tuberculin ; in 31 the treatment was successfully completed, in the remaining cases treatment was discontinued for various reasons. Sanocrysin : 16 patients were treated of whom 4 completed the course ; in the remaining cases treatment was discontinued for various causes. Artificial pneumothorax : 35 patients received this form of treatment in 25 of whom treatment was successfully completed ; in the remaining cases treatment was discontinued because of the absence of space or for other reasons. Other special preparations used in treatment included collosol calcium and calcium chloride, edwenil, euflavine, nordalin, and allocrysin.

The Laboratory at the Sanatorium continues to do useful work ; during the year 924 specimens of sputum were examined ; in addition it has now been made a routine practice to examine the blood sedimentation rates of all patients on admission and on discharge.

Cases of cutaneous tuberculosis receive light treatment at the London Hospital ; during the year 19 patients received such treatment.

TABLE 12.  
GIVING PARTICULARS OF DISPENSARY WORK, 1934.

Dispensaries.	Number of Nurses' attendances at Dispensary.	Number of patients.	Discharged—no further treatment necessary.	Sanatorium or discharged for other reasons.	On books at end of year.	Number of patients' attendances at Dispensary.
DISTRICT NURSES :						
Berkhampstead . . .	24	79	7	51	21	187
Bishop's Stortford . . .	24	79	2	50	27	225
Hatfield . . . . .	22	67	2	32	33	189
Hemel Hempstead . . .	51	113	6	63	44	398
Hitchin . . . . .	51	186	15	110	61	555
Hertford . . . . .	52	277	15	169	93	961
Royston . . . . .	12	12	—	9	3	29
St. Albans . . . . .	64	307	22	143	142	775
Waltham Cross . . . .	52	110	7	74	29	279
Watford {Children . . .	21	117	1	88	28	208
{Adults . . .	50	269	1	181	87	696
COUNTY COUNCIL HEALTH VISITORS :—						
Barnet . . . . .	51	187	9	123	55	623
Letchworth . . . . .	51	140	15	93	32	373
Totals . . . . .	525	1,943	102	1,186	655	5,498



*Nursing of Patients.*—The following figures supplied to me by Miss Harrington give some indication of the work of the district nurses in the county in connection with the nursing of patients suffering from tuberculosis.

During the year, the district nurses have attended 170 cases, of which 81 were nursing cases and 89 observation cases. They have also visited 216 cases for the purpose of taking temperatures. In addition, 260 home condition reports, 67 shelter reports, and 359 supplementary reports on patients' condition have been filled in and forwarded, making a total of 686 reports. The number of visits made by the District Nurses to the homes of tuberculous patients during the year was 7,322.

During the year the County Council Health Visitors have attended 44 cases. In addition, they have filled in 22 home condition reports, 4 shelter reports, and 42 supplementary reports on patients' condition, making a total of 68 reports. The number of visits made by the Health Visitors to the homes of tuberculous patients during the year was 416.

The total number of visits paid to the homes of patients by District Nurses and Health Visitors was 7,738.

**Summary of New Work during the Year.**—In the following table particulars are given of the work carried out during the year in connection with tuberculosis, including recommendations for treatment in the case of new patients.

Number of cases examined	.	.	1,039
Cases treated in sanatoria	.	.	353
Cases treated in hospitals	.	.	63
Cases treated at home	.	.	336
Cases treated at dispensaries	.	.	91
Cases under observation	.	.	150
Contacts examined	.	.	150
Cases recommended milk	.	.	32
Shelters issued	.	.	13
Specimens of sputum examined	.	.	1,973
Tubercle bacilli present	.	.	709

### VENEREAL DISEASES.

The number of new patients from Hertfordshire attending clinics in London during 1934 was 288 compared with 328 for 1933 and 269 for 1932. Of this number 165 compared with 198 were cases of venereal disease, and 123 were found not to be suffering from this disease. The total attendances for the year

were 8,353 compared with 8,502 for 1933. The number of in-patient days was 235 compared with 711 last year, and the number of doses of salvarsan or its substitutes given during the year was 852 compared with 844.

These figures indicate that there have been fewer cases attending for treatment during the year.

The amount of work carried out during the year is shown in the following table :—

TABLE 13.  
ANNUAL SUMMARY FOR 1934.

Hospitals.	New Patients.					Total Attendances.	In-patient days.	Salvarsan. No. of doses.
	Syp.	S.C.	Gon.	Not V.D.	Total.			
Albert Dock . . . . .	—	—	—	—	—	—	—	—
Royal Northern . . . . .	8	—	28	14	50	2070	—	106
Hospital for Sick Children, Gt. Ormond Street . . . . .	—	—	—	16	16	247	—	73
Guy's . . . . .	2	—	8	17	27	392	48	57
King's College . . . . .	—	—	—	1	1	10	—	—
Metropolitan . . . . .	—	—	—	—	—	—	—	—
Middlesex . . . . .	—	—	4	—	4	154	—	—
Miller General . . . . .	—	—	—	—	—	—	—	—
Royal Free . . . . .	3	—	19	18	40	831	101	115
St. George's . . . . .	3	—	5	4	12	236	—	43
St. John's, Lewisham . . . . .	—	—	—	—	—	—	—	—
St. Mary's . . . . .	4	—	6	2	12	393	4	111
St. Paul's . . . . .	2	—	10	8	20	898	21	83
St. Thomas' . . . . .	7	2	18	25	52	966	37	74
Seamen's . . . . .	—	—	—	—	—	—	—	—
S. London for Women . . . . .	—	—	—	—	—	12	—	—
University College . . . . .	6	—	16	6	28	1,330	8	107
West London . . . . .	1	—	1	1	3	57	—	30
Westminster . . . . .	1	—	4	2	7	200	—	15
S. Army Mothers' Hospital . . . . .	—	—	—	3	3	12	4	—
Children's Medical Home . . . . .	—	—	1	—	1	—	12	—
Whitechapel Clinic . . . . .	2	—	4	6	12	545	—	38
Total . . . . .	39	2	124	123	288	8,353	235	852

The total number of pathological examinations made for private practitioners in the County during the year is 127.

The number of pathological examinations carried out for practitioners was 127, compared with 208 for the previous year, while the number of pathological examinations carried out for or at the centres in London was 2,128. Of these examinations, 14 were for spirochætes, 1,131 for gonococci, 662 for Wassermann reaction, and 321 for other reasons.



## BLIND PERSONS.

Under " The Blind Persons Act, 1920 ", the County Council prepared a scheme for promoting the welfare of blind persons ordinarily resident within their area, particulars of which are as follows :—

### Administrative Scheme.

*Area.*—The area to be covered for the purposes of this scheme is the Administrative County of Hertford.

*Date of Commencement.*—The scheme to come into operation on the first day of the month following its approval by the Minister of Health and on that day all previous schemes to be revoked.

*Objects.*—To provide in approved cases for :—

- (a) Children under school age.
- (b) Employment.
- (c) Home Workers.
- (d) Home Teachers.
- (e) Maintenance Grants in Homes.
- (f) Maintenance Grants in Hostels.
- (g) Assistance to unemployable or other destitute blind persons.
- (h) Registration.
- (j) General Social Welfare.
- (k) Miscellaneous.

*Arrangements for carrying out the various objects of the Scheme.*

The County Council to avail themselves as far as they may deem necessary of the assistance of the Hertfordshire Society for the Blind, or other similar agency working on behalf of the blind, but no arrangements to be carried out under this scheme with respect to any blind persons unless such arrangements shall have received the sanction of the County Council, or a Committee of the Council to whom the Council shall have delegated their powers.

(a) *Children under School Age.*

To consider cases of infants born blind, or with sight so defective as to be unable to distinguish common objects. When considered necessary by the County Council arrangements to be made for such children to be boarded out or sent to a residential home for blinded babies, and parents should be encouraged to contribute according to means.

This work will be carried out direct by the County Council.

(b) *Employment.*

Provision to be made, as far as the Council may deem necessary, for the employment of suitable blind persons in workshops for the blind or elsewhere, and for the payment to them of augmentation of earnings on a scale approved by the Council.

(c) *Home Workers.*

Arrangements to be made for the employment of suitable blind persons in the Home Workers' Scheme, conducted by the London Society for Teaching and Training the Blind, Swiss Cottage, or any other society for the blind performing similar functions approved by the Council from time to time; the general conditions of unemployment, including the rate of augmentation, to be subject to the approval of the Council.

(d) *Home Teachers.*

Arrangements to be made for the home teaching and visiting of the blind, and for this purpose the Hertfordshire Society for the Blind shall appoint such home teachers as may be approved by the Council.

(e) *Maintenance Grants in Homes.*

The County Council to make arrangements for the maintenance of blind persons whom it may be considered desirable to send to a home for the blind, which is approved by the Council.

(f) *Maintenance Grants in Hostels.*

The County Council to make arrangements for the maintenance of blind persons employed in approved workshops and resident in a hostel approved by the Council, who, for lack of housing or for some other satisfactory reason, may require such provision.

(g) *Assistance to Unemployable or other Destitute Blind Persons.*

(i) In conjunction with the Public Assistance Committee, to consider the cases of unemployable or other destitute blind persons who are in need of institutional or other non-domiciliary assistance, and to render such assistance as may be desirable in each case, either by payment of recognized fees at approved homes for the blind, by boarding out, or otherwise.

(ii) To provide such domiciliary assistance as may be necessary to any blind person who, in accordance with the declaration made with regard to the domiciliary assistance of blind persons in the Council's Administrative Scheme under Part I of "The



Local Government Act, 1929", must be dealt with under "The Blind Persons Act, 1920".

(h) *Registration.*

To arrange to provide a system of registration of all blind persons living within the area.

(j) *General Social Welfare.*

To make provision for the general social welfare of the blind.

(k) *Miscellaneous.*

To exercise any of the powers and duties of the County Council under Section 2 (1) of "The Blind Persons Act, 1920".

REGULATIONS FOR ADMINISTRATION OF DOMICILIARY  
ASSISTANCE TO NECESSITOUS BLIND PERSONS.

(a) All applications for domiciliary assistance under "The Blind Persons Act, 1920", shall be addressed to the Clerk of the County Council.

(b) Such applications for assistance shall be investigated by an officer of the County Council.

(c) The amount of domiciliary assistance to be given to necessitous blind persons shall be determined by the appropriate Committee upon the merits of each individual case and after taking into account the existing means of the blind person.

(d) All cases granted domiciliary assistance shall be reviewed in detail at least once in twelve months.

(e) The domiciliary grants shall be paid through the Hertfordshire Society for the Blind, or other similar agency working on behalf of the blind, weekly at the home of the recipients, and the Society shall obtain a receipt for such payments on the prescribed form.

(f) These regulations shall come into operation on the first day of the month following its approval by the Minister of Health.

**Registration.**—A system of registration of all blind persons living within the area is carried out by the County Medical Officer of Health.

In carrying out the scheme described above, the County Council have secured the help and co-operation of the Hertfordshire Society for the Blind and the County Nursing Association. The register of blind persons in the County which has been prepared contained :—

		<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
At 31st March, 1926	.	188	203	391
„ „ 1927	.	191	226	417
„ „ 1928	.	211	249	460
„ „ 1929	.	213	255	468
„ „ 1930	.	207	255	462
„ „ 1931	.	212	254	466
„ „ 1932	.	205	251	456
„ „ 1933	.	202	250	452
„ „ 1934	.	202	246	448

During 1934 there were added to the register, 43 blind persons, compared with 39 last year, 17 males and 26 females. The number removed from the register during the year was 47, of which 17 were males and 30 were females ; 88 cases are at present receiving grants from the County Council, 48 males and 40 females.

---

### *MENTAL DEFICIENCY.*

The number of cases reported with a view to investigation as to whether they were mentally defective within the meaning of the Act was 144, compared with 108 during the previous year. Of this number, 97 were found to be mentally defective and three were epileptic ; the remainder, after careful examination and testing as to their standard of intelligence, were not regarded as mentally defective within the meaning of the Act.

From these figures it will be observed that an increased number of cases has been referred for investigation during the year. A certain number of these come through Public Assistance Institutions and these are usually of a low-grade type. A number also has been diverted from mental hospitals to which they originally have been sent. But another factor which makes for an increased number is the existence of Cell Barnes Colony and the knowledge that the Colony provides a high standard of care, supervision, and training for the various types of defectives admitted ; once the prejudice against institutional care and training for mental defectives is broken down cases are referred for investigation which would otherwise be hidden away and escape ascertainment at least for some time.

Table 14 gives the results of the examination of the 144 cases referred for examination, with particulars as to the condition and grade of defect. Of the 144 cases reported, 67 were males and 77 were females, while 23 were above the age of 21, and 121 were below that age. Of these cases, 99 were from urban districts and 45 from rural districts.



TABLE 14.

## PARTICULARS AS TO TYPE OF MENTAL DEFECT.

	Males.		Females.		Total.
	Under 21.	Over 21.	Under 21.	Over 21.	
Idiots . . . . .	4	1	6	1	12
Imbeciles . . . . .	15	3	17	4	39
Feebleminded . . . . .	14	2	14	10	40
Epileptic and Feebleminded	1	—	3	—	4
Epileptic and Idiot . . .	—	—	—	—	—
Epileptic Imbecile . . .	1	—	1	—	2
Epileptic . . . . .	2	—	—	1	3
Physically Defective . . .	6	—	8	—	14
Dull and Backward . . .	17	—	9	—	26
Doubtful . . . . .	1	—	2	1	4
Totals . . . . .	61	6	60	17	144

In the above table particulars are given of the type of defect in all cases examined, and of the group to which they belong. Of the 144 cases examined, 97 were returned as mentally defective, the largest group, namely 41, being females under the age of 21, and of this group 18 are imbeciles and 14 are feeble-minded. The number of males in this group was 35, of which 16 were imbeciles and 14 were feeble-minded. Of the total number examined, 47 were found not to be mentally defective within the meaning of the Act, the largest number of these being returned as dull and backward.

TABLE 15.

## PARTICULARS AS TO CIRCUMSTANCES AND PROCEDURE ADOPTED.

	Males.	Females.	Total.
Sent to Certified Institution or placed under Guardianship (including cases reported in 1933)	53	62	115
Referred to Education Committee . . . . .	47	43	90
Under proper care, no action desired by parents, able to work, or no action taken . . . . .	6	9	15
On waiting list . . . . .	13	9	22
Totals . . . . .	119	123	242

*Institution Accommodation.*—During the year, 109 cases were sent to Cell Barnes or were placed under guardianship, as against 275 so dealt with in 1933. Admissions of children to Kingsmead School are not included in this figure. Of the 107 cases admitted to Cell Barnes, 50 were males and 57 females. Two cases were placed under guardianship. In addition one female was admitted to the certified accommodation at “Shro-dells”. The number of mental defectives in this Institution at the end of the year was 11, and the number discharged during the year was 3, including two defectives on “licence”.

Five cases were admitted to the certified accommodation at the Bishop's Stortford Institution during the year. At the end of the year 38 cases were in this Institution, including 2 on leave on “licence” and during the year 5 were discharged. There was one death.

It will be observed that most of the cases sent to certified institutions were admitted to Cell Barnes Colony. Apart from those mental defectives who are newly ascertained there is now a regular group of cases supplied from various sources which come up for admission. These sources include Kingsmead School, Public Assistance Institutions, Mental Hospitals, and also to some extent defectives under guardianship and statutory supervision, although these will vary in number from time to time.

*Guardianship.*—During the year, 2 additional cases were placed under guardianship, as compared with 3 last year. This small number is of course explained by the fact that the existence of a certified institution now limits the number of defectives who will be placed under guardianship in future. At the present time there are 111 under guardianship in the County, of which 65 are Hertfordshire cases and 46 are out-County cases. In addition there are 10 County cases under the care of the Guardianship Society, Brighton.

There is no doubt, however, that Guardianship serves a very useful and beneficial purpose in the scheme for dealing with mental defectives. When care is exercised in the selection of the guardians and suitable employment is available it provides for the defective, who although high grade is not able to progress as a normal unit, the nearest approach to usefulness under normal conditions. In addition to the care and supervision which the defective receives under guardianship medical and dental treatment may be made available when necessary.

*Statutory Supervision.*—This continues to be carried out by the nurses of the District Nursing Associations in the County, of which there are 87 in number; in addition there are three



County Council health visitors. Visits are made by the nurses to the defectives in their homes ; these visits vary from once a fortnight to twice a year, the most frequent being monthly, two-monthly, and quarterly. A note of each visit is made on the record card with particulars as to any condition relating to the defective to which attention should be drawn. The cards are sent to the County Medical Office at the end of each quarter and they serve as a connecting link between the defectives living at home and the Authority under the Act.

The number of defectives to whom visits were paid by the nurses during 1934 was 316, and the number of visits paid to their homes was 2,024. Of the 316 defectives, 161 were males and 155 were females, and of the 2,024 visits, 999 were paid to males and 1,025 to females. During the year 130 forms giving particulars regarding the home conditions and circumstances of the defectives were forwarded to the County Medical Officer.

*Training and Employment.*—The question of the training and employment of high-grade mental defectives is one which more and more calls for some combined and organized effort. The centre of any such scheme must obviously be Cell Barnes Colony, but there is also need for some assistance to be given to enable high-grade defectives to find training or employment outside a certified institution. This refers in part to high-grade boys discharged to the care of their parents from Kingsmead School who have shown aptitude in boot-making, woodwork, and gardening. If such boys could be apprenticed to some trade for which they had been partially trained so that they could be employed without any great delay they might eventually become useful wage earners.

---

## PUBLIC ASSISTANCE.

The medical services in connection with Public Assistance have worked smoothly and efficiently during the year. Every effort has been made to secure and maintain a high standard of efficiency as regards nursing and treatment in the various

institutions. The value of Public Assistance Institutions in providing essential medical and nursing services in times of emergency has been emphasized on several occasions, one of which has but recently occurred. An important feature of Public Assistance in its medical aspects is the manner in which it is linked to and assists voluntary institutions and agencies as for instance voluntary hospitals and charitable bodies in making provision for sick, infirm, and physically defective persons. The extent to which this is done is indicated by the list of subscriptions paid to charitable institutions, and voluntary bodies, which include hospitals, homes, and welfare and after-care associations. During the year the St. Albans Diocesan Mission to the Deaf and Dumb was added to this list.

The following table shows the existing accommodation in the County Institutions :—

Guardians Committee Area.	Institution.	SICK WARDS.			OTHER WARDS.			Total
		Men.	Women.	Children.	Men.	Women.	Children.	
Barnet .	Barnet . . .	—	—	—	110	81	30	221
	„ Wellhouse Hospital	99	171	55	—	—	—	325
	Hatfield . . .	—	53	—	3	17	—	73
Bishop's Stortford	Bishop's Stortford	75	84	7	59	77	11	313
Dacorum .	Hemel Hempstead	59	51	12	73	49	—	244
East Herts	Ware . . .	42	40	3	68	51	10	264
	<i>Infirm Ward</i>	28	22	—				
Hitchin .	Hitchin . . .	40	44	4	70	66	26	250
St. Albans	St. Albans . .	58	80	—	61	49	18	266
Watford .	Watford . . .	142	157	14	133	102	30	578
	Total . . .	543	702	95	577	492	125	2,534

Under agreements with Voluntary Hospitals :—

Hertford County Hospital . . . . .	50
Bishop's Stortford Voluntary Hospital . . . . .	20

Grand total . . . . . 2,604

**County Institutions.**—In the above table particulars are given of the actual accommodation available in the county institutions at the time of writing. The actual number of beds available in sick and other wards is 2,534, compared with 2,422, the figure given in last year's report. The increased figure is due to additional accommodation provided at Hemel Hempstead,



Hitchin, and Ware. The accommodation provided at Hemel Hempstead and Ware, for the more chronic and infirm type of patient and at Hitchin for children, is of a modern, up-to-date character, bright and airy and in every way conducive to the improvement and contentment of the inmates. The closure of the Berkhamstead Institution has necessitated the transfer of a number of chronic and infirm cases to Hemel Hempstead and this has been accomplished with a minimum of discomfort and the patients are reported to be happy under their altered but much improved conditions. The difficulty of the chronic and senile type of patient in relation to accommodation is frequently present and has made the increased accommodation necessary. A large number of chronic and incurable cases must inevitably lead to overcrowding in times of acute illness. This difficulty however is constantly under review but it is not likely to grow less. The greater the expectation of life and the greater the ratio of old and infirm persons, the greater the demand for accommodation for such cases. It has to be realized that the more successful the efforts of Public Health Authorities are in preventing disease and prolonging life the greater will be the accommodation required for persons of advanced age with failing physical and mental powers.

**Special Services.**—The medical services in connection with Public Assistance Institutions are in certain directions becoming more specialized. Special forms of treatment are now more extensively employed. Reference may be made to the special investigation which has been carried on for some time in the maternity unit of Wellhouse Hospital, Barnet, on the induction of analgesia in labour by means of nitrous oxide and air. This investigation has been carried out by Dr. Segar and Dr. Elam and the results obtained have been highly satisfactory and have proved that the administration of nitrous oxide mixed in a certain proportion with air and administered by the Minnett or Davies apparatus is a safe and efficient method of inducing analgesia in labour. The method is now in use in the other maternity units in the county and in several of the voluntary hospitals. Due credit must be given to the indefatigable work of Dr. Elam in connection with this investigation.

**Consulting Staff.** — The work of the consulting medical staff of the County Institutions continues to be of special value in relation to the treatment of patients. Arrangements have now been made for the routine visitation of the institutions in

addition to the special visits made by the members of the consulting staff when called in by the medical officers of the Institutions. During the year 67 visits have been made by the members of the consulting staff to various Public Assistance Institutions in the County.

### *EPIDEMIC DISEASES.*

The death-rate from epidemic disease is the same as last year, namely 0·16, but if taken to a further decimal figure it is slightly lower, being 0·164, compared with 0·168. The total number of deaths from epidemic disease for 1934 was 71, the same as last year.

TABLE 16.

#### DEATH-RATES FROM EPIDEMIC DISEASES (For each District see Table 18.)

	Hertfordshire.					
	Urban.		Rural.		County.	
	Rate.	Number.	Rate.	Number.	Rate.	Number.
1932	·10	30	·11	14	·10	44
1933	·17	50	·16	21	·16	71
1934	·14	43	·21	28	·16	71

The death-rate from epidemic disease was higher in the rural districts, and lower in the urban districts; the highest rate reached was 0·43 (Buntingford Rural). In seven urban districts the death-rate was over 0·2 per 1,000 and in six urban districts there were no deaths from epidemic disease. In seven rural districts the death-rate was over 0·2 and in two rural districts there were no deaths from epidemic disease.



TABLE 17.

## INFECTIOUS DISEASES.

New cases, returned by District Medical Officers of Health, in the year ending 31st December, 1934.

District.  A	Civil Population, by Estimate 1934.  B	COMMONLY NOTIFIABLE.									
		C Smallpox.	D Scarlet Fever.	E Diphtheria.	F Enteric Fever.	G Puerperal Fever.	H Puerperal Pyrexia.	I Erysipelas.	J Ophthalmia Neonatorum.	Tuber- culosis.	
										K Pulmon- ary.	L Non-Pul- monary.
URBAN.											
1. Baldock . . .	3,381	—	1	—	—	—	1	—	—	4	1
2. Barnet. . . .	16,850	—	49	27	3	6	25	31	1	12	5
3. Bishop's Stortford	10,400	—	12	2	2	1	2	2	1	12	1
4. Bushey . . . .	11,750	—	44	8	—	—	—	1	—	4	1
5. Cheshunt . . .	15,320	—	22	5	1	1	1	8	—	16	4
6. Chorleywood . .	3,395	—	2	—	—	—	—	2	1	2	1
7. East Barnet Valley	21,540	—	102	19	—	1	3	3	2	24	6
8. Great Berkhamstead	8,477	—	35	1	—	—	—	—	—	6	2
9. Harpenden . . .	9,160	—	18	14	—	—	1	5	—	7	2
10. Hemel Hempstead	15,940	—	89	24	—	—	1	10	—	14	5
11. Hertford . . .	12,290	—	20	9	—	—	—	3	—	8	—
12. Hitchin . . . .	15,220	—	30	4	—	1	3	3	—	13	6
13. Hoddesdon . . .	7,792	—	30	1	—	1	—	1	1	9	4
14. Letchworth . .	14,390	—	28	12	—	—	1	8	—	13	4
15. Rickmansworth .	11,680	—	14	1	1	—	—	3	2	4	4
16. Royston . . . .	3,781	—	7	—	—	—	—	—	—	1	1
17. St. Albans . . .	30,980	—	56	52	2	2	7	11	4	42	7
18. Sawbridgeworth .	2,840	—	7	—	—	—	—	1	—	1	—
19. Stevenage . . .	5,696	—	5	—	—	1	—	—	—	3	3
20. Tring . . . . .	4,488	—	18	4	—	—	—	5	—	3	—
21. Ware . . . . .	6,685	—	12	3	—	—	—	—	—	10	4
22. Watford . . . .	57,800	—	240	28	—	6	5	25	1	97	24
23. Welwyn Garden City	9,445	—	10	3	1	—	—	—	—	10	5
Total Urban . . .	299,300	—	851	217	10	20	50	122	13	315	90
RURAL.											
1. Ashwell . . . .	3,546	—	—	—	—	—	1	2	—	—	—
2. Barnet . . . . .	6,894	—	75	10	—	—	1	8	—	7	—
3. Berkhamstead . .	5,328	—	18	4	—	—	—	2	—	7	1
4. Buntingford . . .	4,581	—	8	2	—	—	—	2	—	6	—
5. Hadham . . . . .	5,476	—	8	—	—	1	2	1	—	3	1
6. Hatfield . . . .	12,610	—	32	11	1	—	—	4	—	13	4
7. Hemel Hempstead	8,720	—	12	6	1	—	2	3	—	5	1
8. Hertford . . . .	7,655	—	10	—	—	—	—	—	—	2	—
9. Hitchin . . . . .	14,710	—	13	7	1	1	—	2	—	10	8
10. St. Albans . . .	21,670	—	56	102	2	2	7	8	2	24	5
11. Ware . . . . .	13,590	—	25	10	—	—	—	—	—	6	2
12. Watford . . . .	21,230	—	63	9	—	—	2	6	—	7	3
13. Welwyn . . . . .	4,040	—	6	—	—	—	—	1	—	2	1
Total Rural . . .	130,050	—	326	161	5	4	15	39	2	92	26
Total for County .	429,350	—	1177	378	15	24	65	161	15	407	116

**Smallpox.**—There were no cases of smallpox notified during the year.

**Measles and Whooping-Cough.**—The number of deaths from measles during the year was 12, compared with 4 last year. There were 7 deaths from whooping-cough compared with 24 last year, 6 in urban districts and 1 in rural districts. Of the 7 deaths 3 were under the age of twelve months compared with 8 last year.

**Scarlet Fever.**—There were 1,177 notifications of scarlet fever during the year compared with 866 notifications last year. There were 8 deaths from scarlet fever during the year, the same as last year. Of the 8 deaths one was an adult male and 6 occurred in rural districts. Scarlet fever was more widely prevalent in the County during the year. Its chief centres were the urban districts of Barnet, Bushey, East Barnet, Hemel Hempstead, St. Albans, and Watford, and the rural districts of Barnet, St. Albans, Watford, and Hatfield. The disease was generally mild in type, only 8 deaths in 1,177 cases notified.

**Influenza.**—There was a marked decrease in the number of deaths from this disease, only 39 compared with 210 during 1933. Of this number 29 occurred in urban districts and 10 in rural districts. In both urban and rural districts the largest number of deaths occurred over 45 years of age. The disease generally was mild in type.

**Diphtheria.**—There were 378 cases of diphtheria notified during the year compared with 269 in 1933, 217 in the urban districts and 161 in the rural districts. The highest number of notifications was received from St. Albans (52), Barnet (27), and Watford (28), and from the rural districts of St. Albans (102) and Hatfield (11). There were 26 deaths from diphtheria compared with 22 last year, 15 in urban districts and 11 in rural districts; the largest number of deaths occurred in the St. Albans Urban District.

**Enteric Fever and Paratyphoid Fever.**—The total number of cases of enteric fever including typhoid and paratyphoid fever notified during the year was 27, compared with 20 last year; of this number, 15 were cases of enteric fever and 12 were cases of paratyphoid fever. Of the cases of typhoid fever, 10 were notified from urban districts and 5 from rural districts. The largest number of cases of enteric fever notified in one district was 3 (Barnet Urban). There were two deaths from enteric fever the same as last year.

**Undulant Fever.**—There was one case of undulant fever notified during the year.



**Puerperal Fever.**—There were 24 cases of puerperal fever notified during the year, compared with 12 last year, 20 in urban districts and 4 in rural districts. Sixty-five cases of puerperal pyrexia were notified compared with 43 last year, 50 in urban districts and 15 in rural districts. The largest number of cases of puerperal fever notified in urban districts was 6 (Barnet and Watford). The deaths from puerperal fever numbered 11, 7 in urban districts and 4 in rural districts, compared with 8 last year.

**Erysipelas.**—There were 161 cases of erysipelas notified during the year, 122 in urban districts and 39 in rural districts, compared with 112 for the previous year, but no information is available regarding the actual number of deaths in the County from this cause. The largest number notified in the urban districts was 31 (Barnet) and 25 (Watford), and in the rural districts 8 (Barnet and St. Albans).

**Meningococcal Meningitis and Encephalitis Lethargica.** — There were 6 notifications of meningococcal meningitis, compared with 10 last year, 5 in urban and 1 in rural districts. There were 7 deaths from this disease compared with 4 last year. There were no notifications of encephalitis lethargica, but there were 8 deaths from this disease, 6 in urban districts and 2 in rural districts.

**Poliomyelitis and Polioencephalitis.** — There were 4 cases of poliomyelitis notified during the year, but no deaths from this cause; there was one death from polioencephalitis during the year.

**Pneumonia and Broncho-pneumonia.**—There were 247 cases of pneumonia, including all forms, notified during the year compared with 264 last year, the number of deaths from this cause being 209 compared with 225 last year. There were 148 deaths in urban districts and 61 in rural districts; the deaths in urban districts being considerably decreased but those in rural districts remaining much the same. In the urban districts the largest number of deaths occurred at the extremes of life, viz. 25 under 1 year and 30 over 75 years; in the rural districts there were 6 deaths under 1 year and 8 over 75 years.

**Bronchitis.**—The number of deaths from bronchitis was 148, compared with 174 last year. The number of deaths in urban districts was 116 and in rural districts 32. Of the total number of deaths from bronchitis 76 were males and 72 were females. There were 10 deaths from bronchitis under the age of twelve

months compared with 6 last year. Of the 148 deaths from bronchitis 80 were over the age of 75.

**Heart Disease.**—There is an increase in the number of deaths from heart disease, which was 1,146, compared with 1,086 for 1933. Of the total number 807 were in urban and 339 in rural districts, and 519 were males and 627 were females, compared with 536 and 550 respectively for last year. It will be observed that the increase has occurred in females only. Of the total 1,146 deaths 861 occurred above the age of 65.

**Other Diseases.**—The number of deaths from acute and chronic Bright's disease was 121 compared with 124 last year. The number of deaths from cerebral hæmorrhage was 236 compared with 229. The number of deaths from cirrhosis of the liver was 13 as compared with 18 last year. The deaths from appendicitis were 41 as compared with 38 last year. There were 60 deaths from diabetes during the year, 39 in urban districts and 21 in rural districts. Of the total number of deaths there were 38 in persons over the age of 65.

**Other Notifiable Diseases.**—During the year 3 cases of dysentery were notified, and the number of cases of ophthalmia neonatorum notified during the year was 15 compared with 14 last year. Three cases of pemphigus were notified and one case of malaria. There was also one case of Weil's disease reported during the year.

#### ISOLATION HOSPITALS.

The County Council has prepared the following scheme for the provision of Hospital accommodation for the treatment of infectious disease in the County in pursuance of their powers under Section 63 of "The Local Government Act, 1929". The scheme has been approved by the Minister of Health.

#### "Local Government Act, 1929," Section 63.

*Scheme for the provision of Hospital Accommodation for the Treatment of Infectious Disease.*

The Hertfordshire County Council, in pursuance of their powers under Section 63 of "The Local Government Act, 1929", hereby make the following scheme :—

**I. Infectious Diseases other than Smallpox.**—(1) With a view to the provision of adequate hospital accommodation for the treatment of infectious diseases other than smallpox in the County of Hertford, the County shall be divided into areas consisting of the County Districts specified in the second column of the subjoined table, and there shall be provided



TABLE 18—CHIEF STATISTICS OF URBAN AND RURAL DISTRICTS, 1934.

As compared with those for 1933 and with the averages for ten years 1911-1920 and 1921-1930.

DISTRICTS.		POPULATION.				Acreage (land and inland water), 1931.	Number of Rooms occupied, 1921.	Rooms per Person, 1921.	BIRTH-RATE. §				DEATH-RATE. §				INFANT MORTALITY.				EPIDEMIC MORTALITY. §		DEATH-RATE FROM PHTHISIS. §				DEATH-RATE FROM CANCER. §				DISTRICT.	
		By estimate, 1934.	By Census, 1931.	By Census, 1921.	By Census, 1911.				1934.	1933.	10 years. *	10 years. ‡	Crude 1934.	Corr- ected 1934.	1933.	10 years. *	10 years. ‡	1934.	1933.	10 years. *	10 years. ‡	1934.	1933.	1934.	1933.	10 years. *	10 years. ‡	1934.	1933.	10 years.* †		10 years. ‡
Urban. SUMMARY		299,300	280,945	228,546	194,242	70,048	275,492	1'26	13'8	13'6	16'1	18'0	10'6	10'0	10'8	10'4	11'6	40	44	46	67	14	17	54	55	6	8	1'7	1'3	1'4	1'2	Urban.
1	Baldock ... ..	3,381	3,171	2,475	2,094	542	3,146	1'31	17'1	16'6	16'1	19'9	13'3	12'5	13'9	13'2	14'8	52	89	47	85	...	29	88	1'18	6	9	2'9	2'0	1'7	1'2	1
2	Barnet ... ..	16,850	14,721	11,740	10,440	3,114	13,946	1'27	12'0	12'2	15'1	16'5	10'2	9'0	10'1	10'9	11'1	34	56	49	67	11	...	47	43	5	5	1'6	1'3	1'5	1'4	2
3	Berkhampstead ...	8,477	8,053	7,250	7,302	1,208	9,576	1'40	11'0	13'1	15'0	16'0	10'2	9'0	9'9	11'2	12'6	85	18	50	62	...	11	82	23	7	6	1'5	8	1'4	1'1	3
4	Bishop's Stortford	10,400	9,509	8,840	8,721	3,371	10,528	1'35	13'5	13'5	13'9	16'8	12'3	10'4	10'6	11'6	12'7	71	36	50	76	09	...	48	59	6	6	1'6	1'7	1'5	1'3	4
5	Bushey ... ..	11,750	11,243	8,020	6,978	3,081	9,577	1'36	13'4	11'4	14'2	15'3	8'5	9'3	9'7	9'2	9'6	51	67	51	59	08	08	42	42	5	6	1'1	1'5	1'3	1'1	5
6	Cheshunt ... ..	15,320	14,651	13,640	12,954	8,479	15,077	1'12	13'1	14'6	17'5	20'8	9'2	9'0	11'0	9'8	11'6	69	54	45	71	06	06	32	26	6	8	1'2	9	1'1	1'0	6
7	Chorleywood ...	3,395	3,296	2,331	...	1,989	3,440	1'47	10'3	7'3	14'3	...	10'3	9'6	6'7	9'5	...	57	80	55	...	...	...	88	5	...	1'4	8	1'1	...	7	
8	East Barnet Valley	21,540	18,542	13,490	13,381	2,644	17,390	1'32	14'7	14'1	16'2	16'8	9'7	9'7	8'4	9'6	9'8	35	49	49	48	27	18	64	49	4	6	1'2	1'3	1'3	1'1	8
9	Harpenden ... ..	9,160	8,349	6,670	6,172	1,633	8,846	1'43	8'9	10'7	11'5	14'6	8'0	7'6	12'7	9'3	10'2	24	41	37	51	21	00	43	33	4	6	2'1	2'4	1'4	1'3	9
10	Hemel Hempstead	15,940	15,122	13,920	12,888	7,184	16,158	1'24	14'2	13'3	15'5	20'3	9'2	8'5	11'5	10'7	12'9	40	34	41	60	13	38	18	77	4	1'0	1'5	1'4	1'3	1'1	10
11	Hertford ... ..	12,290	11,376	10,750	10,383	1,503	12,212	1'24	12'6	14'2	15'6	19'1	11'6	10'7	10'6	11'6	13'8	26	51	47	78	...	16	56	56	6	9	1'7	9	1'4	1'7	11
12	Hitchin ... ..	15,220	14,382	13,352	11,905	3,675	16,664	1'29	13'0	14'0	16'3	19'7	12'1	10'8	12'5	11'8	13'2	25	86	61	67	06	19	45	39	5	7	2'1	1'3	1'4	1'3	12
13	Hoddesdon ... ..	7,792	6,811	5,400	5,196	1,576	6,716	1'27	18'9	15'5	17'0	18'3	11'8	11'2	9'9	12'2	13'1	27	25	50	70	2	25	89	...	3	1'0	1'9	1'1	1'5	1'6	13
14	Letchworth ... ..	14,390	14,454	10,210	...	3,651	11,433	1'15	13'8	11'5	17'3	...	8'7	9'4	9'9	8'1	...	20	30	45	...	20	20	48	41	5	...	1'5	1'3	1'0	...	14
15	Rickmansworth ...	11,680	10,810	7,520	6,288	4,727	9,058	1'24	13'8	16'7	18'3	18'4	9'3	9'3	11'1	10'9	10'0	43	64	44	65	08	08	08	36	5	7	1'8	1'3	9	9	15
16	Royston ... ..	3,781	3,831	3,780	3,985	1,003	5,008	1'42	11'9	7'8	13'3	15'6	12'9	8'9	17'6	12'8	13'0	22	...	48	74	26	...	52	1'31	4	1'0	2'9	5'2	1'9	1'4	16
17	St. Albans ... ..	30,980	28,625	25,620	18,133	2,698	32,008	1'29	13'3	12'9	14'4	17'6	12'8	11'6	11'7	10'8	11'6	48	23	55	65	38	29	58	72	6	7	2'0	1'0	1'4	1'2	17
18	Sawbridgeworth ...	2,840	2,604	2,285	2,304	2,678	2,953	1'30	10'2	17'5	16'5	17'0	14'4	11'9	13'5	10'5	13'5	69	20	56	76	35	1'0	70	35	2	6	1'7	2'1	1'1	7	18
19	Stevenage ... ..	5,696	5,476	5,023	4,856	4,545	6,486	1'31	15'0	12'2	16'4	19'1	11'0	9'6	11'8	10'7	11'6	46	15	49	63	...	18	35	...	2	6	1'9	1'4	1'2	1'1	19
20	Tring ... ..	4,488	4,364	4,278	4,481	4,407	5,784	1'36	13'8	13'8	16'6	18'9	14'0	10'5	13'8	13'1	13'2	...	65	33	54	22	...	89	90	6	7	2'4	1'3	1'8	1'4	20
21	Ware ... ..	6,685	6,171	5,950	5,842	629	6,550	1'14	17'8	15'3	18'6	19'6	16'1	13'6	13'0	11'8	13'3	31	60	44	69	...	...	89	31	6	7	2'5	2'6	1'2	1'1	21
22	Watford ... ..	57,800	56,799	46,002	40,939	3,251	52,936	1'18	13'9	14'1	16'8	18'0	10'7	10'8	10'9	9'7	10'7	38	64	50	73	10	19	74	77	7	9	1'6	1'4	1'2	1'0	22
23	Welwyn Gdn. City	9,445	8,585	...	...	2,460	...	...	20'2	18'3	...	...	4'7	5'9	5'9	...	...	16	24	...	...	10	...	31	64	...	...	74	6	...	...	23
Rural. SUMMARY		130,050	120,214	103,674	117,042	334,472	123,112	1'30	13'9	13'5	14'8	18'2	10'1	9'2	10'7	10'3	11'6	33	37	45	58	21	16	33	47	5	7	1'4	1'3	1'3	1'2	Rural.
1	Ashwell ... ..	3,546	3,486	3,600	3,948	22,049	4,962	1'38	16'6	14'7	14'0	16'4	11'5	7'7	12'5	14'1	14'1	17	77	61	61	...	...	...	...	5	1'0	1'4	1'7	1'7	1'9	1
2	Barnet ... ..	6,894	6,398	4,500	4,969	9,215	5,320	1'24	18'2	18'3	17'2	19'3	8'8	9'8	10'2	9'8	9'6	24	64	37	51	43	14	72	1'03	4	5	1'7	1'3	1'3	8	2
3	Berkhampstead ...	5,328	5,379	4,692	4,707	18,384	5,903	1'26	11'6	12'4	15'8	17'2	12'0	10'2	10'8	11'8	13'1	64	...	59	69	18	...	56	38	7	5	2'4	2'0	1'5	1'3	3
4	Buntingford ... ..	4,581	4,639	4,890	5,019	28,470	6,503	1'35	10'0	13'4	15'0	18'8	13'9	10'8	13'8	13'1	13'4	22	79	51	44	43	...	21	42	5	6	1'0	2'1	1'8	1'4	4
5	Hadham ... ..	5,476	5,471	5,480	5,795	25,466	7,256	1'36	13'1	11'4	15'4	17'3	11'6	9'0	16'0	12'9	13'5	28	79	44	53	...	...	36	73	3	6	2'5	1'8	1'6	1'4	5
6	Hatfield ... ..	12,610																														

\* 1921-1930.

† 1911-1920.  
|| Per 1,000 births.

§ Per 1,000 of population.





for each such area not less accommodation than that specified in the third column and placed opposite to the number and description of the area :—

(1)	(2)	(3)
<i>No of Area.</i>	<i>County Districts comprised in area.</i>	<i>Minimum accommodation in beds.</i>
i	Barnet U.D. East Barnet Valley U.D. Barnet R.D.	50
ii	Borough of Hemel Hempstead Great Berkhamstead U.D. Tring U.D. Berkhamstead R.D. Hemel Hempstead R.D.	45
iii	Borough of Hertford Bishop's Stortford U.D. Sawbridgeworth U.D. Ware U.D. Hoddesdon U.D. Cheshunt U.D. Hertford R.D. Ware R.D. Hadham R.D. (including Buntingford R.D.) Hatfield R.D.	80
iv	Baldock U.D. Hitchin U.D. Letchworth U.D. Royston U.D. Stevenage U.D. Hitchin R.D. (including Ashwell R.D.) Welwyn R.D.	60
v	City of St. Albans Harpenden U.D. Welwyn Garden City U.D. St. Albans R.D.	65
vi	Borough of Watford Bushey U.D. Chorleywood U.D. Rickmansworth U.D. Watford R.D.	100

(2) In Area No. i the additional accommodation rendered necessary by this scheme shall be provided by the Councils of the County Districts comprised in the area, either by arrangement with the Barnet Isolation Hospital Committee, or otherwise.

(3) In Areas Nos. ii to v inclusive, the accommodation rendered necessary by the provisions of this part of this scheme shall be provided by the Councils of the County Districts concerned, for which purpose they shall, as soon as may be, initiate action and carry through any proceedings that may be necessary on their part for forming united districts or altering the constitution of existing united districts as may be required pursuant to the provisions of Sections 279 and 297 of "The Public Health Act, 1875", with a view to the formation of a Joint Hospital Board for each such united district, or for combining pursuant to the provisions of Section 131 of "The Public Health Act, 1875".

(4) In Area No. vi the accommodation rendered necessary by this scheme shall be provided by the Watford Joint Hospital Board.

(5) Any agreement made in pursuance of Section 131 of "The Public Health Act, 1875", under Clause (3) may provide for the payment of a capital sum to the Council or Joint Board maintaining the Hospital by the Council from whose district patients are to be received into the hospital, and every such agreement shall provide for the payment of such other sum by way of annual retaining fee and weekly payments for the maintenance and treatment of patients in the hospital as may be agreed between the parties thereto, or in default of agreement as may be determined by a single arbitrator appointed under, and subject to the provisions of, "The Arbitration Act, 1889."

(6) Every Authority maintaining a hospital in accordance with the provisions of this scheme shall, if in the opinion of the County Medical Officer of Health circumstances so require and accommodation is available, admit patients from districts within the County from which they are not, under the foregoing provisions of this scheme, required to receive patients, the terms of admission to be such as may be agreed between the Authorities concerned and approved by the County Council, or in default of agreement as may be determined by the County Council.

**II. Smallpox.**—(7) With a view to the provision of adequate hospital accommodation for the treatment of smallpox, the



County Council in pursuance of Sub-section (1) of Section 14 of "The Local Government Act, 1929", shall provide a hospital or hospitals with a total minimum accommodation of 32 beds with facilities for immediate extension in case of necessity for the reception of persons suffering from smallpox who are inhabitants of the County, and the expenses incurred by the County Council in this connection shall be defrayed as expenses for general County purposes.

### *BACTERIOLOGICAL EXAMINATIONS.*

The arrangements made with the laboratory at Hill End Mental Hospital for the bacteriological examination of sputum, milk, and other specimens have continued to work well and have increased in scope during the year. In the following interesting and detailed report (for which I am indebted to Dr. Kimber) particulars are given of the work carried out at the laboratory during the year for the County Council, Local Authorities, and Hospitals.

The work done for outside authorities has shown a steady increase, especially in the number of diphtheria swabs and water samples examined on behalf of Local Authorities, whose co-operation in the work of the laboratory is requested.

### *HERTS COUNTY MENTAL HOSPITAL, HILL END.*

#### LABORATORY REPORT.

By *W. J. T. Kimber, L.R.C.P., D.P.M.*, Medical Superintendent,  
and *A. Margaret McGrath, B.A., M.B., D.P.M.*, Pathologist.

The number of specimens examined from the Hospital and from outside sources has continued to increase :—

	1931.	1932.	1933.	1934
Herts County Mental Hospital . . . . .	1,327	1,310	1,375	1,850
Hertfordshire County Council and other outside Authorities . . . . .	1,079	1,955	2,740	3,068

Summary of work undertaken for the Hospital during the year :—

Urines : Diastase 1 ; T.B. 3 ; routine 249 ; microscopy 54 ; albumen only 17 ; sugar % 167 ; sugar test 146 ; acetone only 44 ; urea 5 ; bile 1 ; culture 12. Blood : Full count 59 ; W.B.C. and differential 8 ; hæmoglobin and R.B.C. 14 ; urea 21 ; culture 6 ; W.R. 294 ; Kahn 134 ; bile 3 ; malaria 4 ; sugar single 2 ; sugar curves 3 ; Widal 65 ; calcium 6 ; sedimentation 3. C.S.F. : Kahn 4 ; W.R. 25 ; routine 27 ; calcium 1. Sputa :

T.B. 31; other organisms 4. Stools: Culture 101; T.B. 50; blood 23; microscopy 2; worms 3. Swabs: Throat for dip. 122; other organisms 3; nasal for K.L.B. 8. Schick test: 34; K.L.B. virulence 5; cervical 1. Cultures: Tonsils 2; bleb 1; pus 2; lavage 1. Sections: 7. Vaccines: 4. Milk: Bacteriology 7. Water: Bacteriology 4; chemistry 2. Gastric test meal: 5. Vomit: For Blood 1. Pleural Fluid: 1. Hairs: For ring-worm 1. Autopsies 51 (77·3 per cent of deaths).

Summary of work undertaken for Cell Barnes Mental Deficiency Colony during the year:—

Culture agglutination 1; K.L.B. culture (animal inoculation) 15; blood Widal 5; fæces culture agglutination, microscopy of culture 17; vaccine 2; a total of 44 examinations.

Schick testing and immunization of positives has been carried out during the year on sufficient nurses to enable a ward to be fully staffed with immune nurses in the case of a possible outbreak of diphtheria on the female side. The same tests are at present being completed on the male side. It has been found necessary to resort to the Moloney test before the use of T.A.M. The shortage of T.A.F. in the country has necessitated the use of T.A.M. but it is felt that the floccules are to be preferred in the immunization of adults, especially now that the price is no longer prohibitive.

One K.L.B. carrier was found among the female patients. The first virulence test on this patient was positive. After tonsillectomy the K.L.B. persisted in almost pure culture but after some weeks the virulence test became negative.

During the greater part of the year the Kahn test has been carried out in addition to the Wassermann reaction but has not proved very helpful since known positives under treatment gave negative Kahns while still being positive to the W.R. and in no case was a doubtful W.R. found to be a positive Kahn. It would not appear to be a sufficiently reliable test to substitute for the W.R.

During the summer and autumn a sporadic outbreak of paratyphoid B occurred in one female ward involving some of the staff. The Widal reaction was done on all patients in this ward and positive results were found in eight of these routine examinations of patients who had not had symptoms. Stools were examined and those of two healthy patients gave growths of para B. on one occasion but they did not eventually prove to be carriers.

One male patient developed agglutinations in his stool of 1 in 1,000 for salmonella group but for para B. only up to



1 in 125, while in his blood the Widal gave para B. up to 1 in 5,000 but salmonella group up to 1 in 1,000 only. No further positive stools could be obtained for continued work and so this organism was sent to the Medical Research Council who returned it as a para B. having both specific and group antigens.

One female patient died from the toxæmia caused by an unidentified organism of the salmonella group.

Summary of work undertaken for the County Medical Officer of Health and other Outside Authorities :—

Urine : Routine 3 ; microscopy 37 ; microscopy and culture 48 ; microscopy, culture, and T.B. 18 ; T.B. 1 ; urea 72 ; sugar % 1 ; guinea pig inoculation 1. Blood : Full count 35 ; W.B.C. and differential 7 ; hæmoglobin and R.B.C. 12 ; complement fixation 3 ; culture 10 ; sugar (single) 5 ; sugar curves 2 ; W.R. 60 ; Widal 23 ; malaria 1 ; N.P.N. 1. Pleural Fluid : T.B. and culture organisms 16 ; T.B. 1. C.S.F. : Routine 19 ; W.R. 3 ; culture 14 ; chlorides 1. Pus : 25. Swabs : Throat hæmolytic streptococci 129 ; nasal hæmolytic streptococci 11 ; cervical and vaginal 37 ; cervical and vaginal smears 23 ; eye swabs 6. Hairs : Ringworm 7. Sections 12. Milk : Grade "A" 95 ; school milk 100 ; bacteriology only 12 ; certified 3 ; pasteurized 11 ; for abortus 8 ; for T.B. 187 ; animal inoculation 11 ; cow's blood for abortus 8. Fæces : For T.B. 3 ; culture 9 ; for blood 1 ; microscopy 3. Water : Bacteriology 16 ; chemistry 45. Sewage : Chemistry 3. Milk : Human 1. Viscera : For organisms 1. Soil : Bacteriology 2. Test meals 3. Vaccines 2. Sputa : For organisms 3 ; for T.B. 1,084. Throat swabs for K.L.B. 692. Nasal Swabs for K.L.B. 75. Ear swab 2.

	%	
Sputa percentage positive . . .	19·46	
K.L.B. percentage positive . . .	18·07	
Swabs for hæmolytic streptococci .	27	
Grade " A " and other milks . . .	67	conformed to standard.
Milk for school children . . .	55	conformed to Grade " A " standard.

Two hundred cultures on throat and nasal swabs from local authorities were put up in duplicate on Loeffler's medium and tellurite. It is claimed for the latter that colonies of K.L.B. show up a dense black in twenty-four hours while the growth of other organisms is inhibited. It was found that K.L.B. did not show characteristics differentiating it from other diphtheroids and that in order to bring these back the colonies had to be sub-cultured on to Loeffler's medium again. Consequently it was found that the tellurite medium was of the greatest use in wholesale swabbing in the case of epidemics, when all tellurite

cultures which grew no black colonies could be discarded by macroscopical examination alone, thus saving much time. It was also found to be very useful in obtaining pure culture of K.L.B. from very mixed swab cultures for the performance of the virulence tests.

---

### *PUBLIC VACCINATION.*

There is little to report in connection with the service of Public Vaccination in the county except that the number of persons vaccinated continues to decrease.

The total number of vaccinations during the year was 1,574 compared with 1,709 last year.

The ease with which exemption is now obtained and the view now very generally held that there is little prospect of any reappearance of smallpox of severe type are mainly responsible for the progressively diminishing number of persons and more especially infants who are being vaccinated. It is difficult to keep up any satisfactory standard of immunization against any special disease in the continued absence of any severe evidence of that disease.

The duties of Public Vaccinators are laid down in the Vaccination Order, 1930, and the instructions to these officers are given in the Fourth Schedule of the Order. Every Public Vaccinator may be appointed on such terms and conditions of service as the County Council may think proper. The officers are paid according to a scale of fees, but in one district the remuneration consists of an annual salary. A uniform scale of fees has been adopted by the County Council for all appointments of public vaccinators as from 1st April, 1930.

As regards the number of vaccinations carried out, the following figures refer to the twelve months ending 31st December, 1934 :—

Primary Vaccinations	.	1,471
Revaccinations	. .	103
		<hr/>
Total	. . .	<u>1,574</u>

Of the primary vaccinations, 1,309 were under one year of age, and 162 were one year and upwards. The largest number of primary vaccinations during the period stated was carried out in the following districts: Barnet (245), St. Albans (66), Watford (80), Bishop's Stortford (62). The largest number of revaccinations was carried out in Watford (8).



### NURSING HOMES.

"The Nursing Homes Registration Act, 1927," provides for the registration and inspection of nursing homes and it is an offence under the Act for any person to carry on a nursing home without being duly registered. Application for registration has to be made to the local supervising authority and has to be accompanied by a fee of five shillings. The authority may refuse to register an applicant if they are satisfied (a) that he or any person employed by him is not a fit person to carry on or be employed at a nursing home ; (b) that the premises are not fit to be used for a nursing home owing to situation, construction, accommodation, staffing, or equipment, or that the premises are used in a way unsuitable or undesirable in the case of a nursing home ; and (c) that the conditions laid down in the Act as to the qualifications of those in charge of nursing homes and maternity homes are not being complied with.

A nursing home is defined under the Act as any premises used or intended to be used for the reception of and the providing of nursing for persons suffering from any sickness, injury, or infirmity, and includes a maternity home ; it does not include (a) any hospital or premises maintained or controlled by a Government department or local authority or any other body of persons constituted by Special Act of Parliament or incorporated by Royal Charter ; (b) any institution for lunatics within the meaning of the "Lunacy Act, 1890" ; and (c) any certified institution, certified house, or approved home within the meaning of "The Mental Deficiency Act, 1913".

The County Council has made by-laws under the Act with respect to nursing homes in the county.

There are at the present time 44 nursing homes in the County registered under the Act. Some of these homes provide for a special type of patient, e.g. maternity cases, senile and chronic cases, but the majority are homes which provide for a varied type and class of patient. The private nursing home for senile and chronic cases serves a very useful purpose as they provide accommodation for a type of patient who, though not acutely ill, requires care and attention.

---

### MATERNITY AND CHILD WELFARE.

The infant mortality for the year was 37, compared with 42 last year and this definite fall is due to a further decrease in the number of deaths from congenital debility and premature

birth which must be attributed to the efforts which are being made to promote the health and well-being of mothers and infants. The infant mortality for 1934 is the lowest which has so far been reached, the previous lowest being 42 in 1933. It is interesting to note that in 1900 and 1901 the rates were 112 and 103 and in 1933 and 1934 the infant mortality was 42 and 37 respectively.

The scheme of Maternity and Child Welfare in the County includes both official and voluntary effort, and is summarized as follows : (1) Thirteen County Council Maternity and Child Welfare Centres, at which consultations are held, infants are weighed, and instruction and advice are given to nursing and expectant mothers ; in addition, also, a considerable amount of voluntary work is undertaken in various directions by ladies who are interested in the work of the Centres ; (2) eight special ante-natal clinics at Barnet, Berkhamstead, East Barnet, Hertford, Hitchin, Letchworth, Tring, and Waltham Cross ; ante-natal clinics are also held at the remaining five Centres : (3) 32 Voluntary Maternity and Child Welfare Centres ; (4) 11 weighing centres ; (5) provision of maternity beds in four districts in the County, namely, Hertford, Hitchin, Hemel Hempstead, and Watford ; (6) Convalescent Home at St. Leonards ; (7) attendance at orthopædic and massage clinics and dental clinics ; (8) the provision of hospital treatment for orthopædic cases, infantile diarrhoea and ophthalmia neonatorum ; (9) health visiting ; (10) the granting of milk free or at half cost to necessitous mothers and young children on a medical certificate ; and (11) arrangements for the hospital treatment of cases of notifiable puerperal fever in approved institutions. Additional arrangements have also been made under the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations for consultation with an obstetric specialist, for skilled nursing and for necessary bacteriological examinations in cases of puerperal pyrexia and sepsis.

During the year arrangements were made to provide facilities for immunization against diphtheria of young children, chiefly those under the age of three years. Under this scheme over 600 children have been immunized against diphtheria.

**Voluntary Centres.**—There are now 32 voluntary centres and 11 weighing centres in the County, which for the most part have been established in rural districts by the District Nursing Associations and they provide for the care and supervision of expectant mothers, nursing mothers, and young children in



TABLE 19.

GIVING PARTICULARS OF ATTENDANCES AT VOLUNTARY MATERNITY AND CHILD WELFARE CENTRES AND ANTE-NATAL CLINICS DURING 1934.

Centre.	No. of times Centre open.	No. of mothers attending.	No. of children who attended Centre for first time during 1934 and who, on the date of their first attendance were:—	(a) Under 1 year of age. (Excluding those known to have attended Centre in another district previously.)	(b) Between 1 and 5 years of age.	Total No. of children who attended Centre during 1934 and who, at the end of the year, were:—	(a) Under 1 year of age.	(b) Between 1 and 5 years of age.	No. of attendances at Centre by children:—	(a) Under 1 year of age.	(b) Between 1 and 5 years of age.	TOTAL CHILDREN'S ATTENDANCES.	Average attendance of children.	No. of deaths of children.	No. of children who had orthopaedic treatment.	No. of infant consultations.	No. of mothers' consultations.	No. of talks given at Centre.	No. of times Ante-Natal Clinic open.	No. of expectant mothers attending.	No. of attendances by expectant mothers.	Average attendance of expectant mothers per session.	No. of ante-natal consultations.	No. of doctors' attendances at Infant Welfare Centre and Ante-Natal Clinic.
Aldbury	22	21	5	3	19	62	171	233	10.6	—	—	47	—	13	—	—	—	—	—	—	—	—	11	
Apsley End	23	59	26	26	46	326	254	580	25.2	—	—	182	—	21	—	—	—	—	—	—	—	—	22	
Baldock	48	103	51	41	95	710	918	1,628	33.9	1	—	602	—	—	—	32	32	—	48	41	41	0.9	41	48
Boreham Wood	22	131	62	52	126	751	590	1,341	61.0	—	—	245	—	—	—	—	—	—	—	—	—	—	—	12
Buntingford	50	69	29	23	73	270	410	680	13.6	2	—	132	—	5	—	—	—	—	—	—	2	—	—	12
Chipperfield	24	81	29	25	90	296	663	959	40.0	—	—	404	—	26	—	24	—	—	12	35	35	2.9	35	36
Chorleywood	23	44	18	18	38	115	323	438	19.0	—	—	438	—	21	—	—	—	—	12	11	23	1.9	23	23
Colney Heath	23	71	29	26	76	166	571	737	32.0	1	—	140	—	3	—	10	—	—	12	93	207	17.3	207	44
Harpenden	32	178	50	44	174	842	1,409	2,283	71.3	1	—	640	—	3	—	10	—	—	12	91	186	15.5	186	36
Hoddesdon	50	229	121	98	198	1,409	890	2,299	46.0	—	—	671	—	6	—	7	—	—	13	21	56	4.3	56	13
Kimpton	26	53	26	24	54	296	355	651	25.0	—	—	38	—	—	—	—	—	—	10	7	18	1.8	18	10
King's Langley	12	73	30	24	71	152	281	433	36.1	—	—	420	—	—	—	3	—	—	—	—	—	—	—	5
Knebworth	46	42	13	13	44	366	546	912	19.8	—	—	196	—	—	—	—	—	—	—	—	—	—	—	16
Langleybury	21	34	16	11	42	204	149	353	16.8	—	—	31	—	—	—	6	—	—	—	—	—	—	—	13
London Colney	21	58	31	25	56	198	326	524	25.0	—	—	28	—	—	—	3	—	—	13	10	31	2.4	31	13
North Mymms	25	35	22	22	29	259	340	599	24.0	—	—	112	—	—	—	7	—	—	—	—	—	—	—	6
Potten End	11	26	7	4	36	42	163	205	18.6	—	—	43	—	—	—	—	—	—	—	—	—	—	—	5
Little Gaddesden	11	14	7	6	14	27	87	114	10.4	—	—	361	—	—	—	—	—	—	24	4	7	0.3	7	24
Radlett	24	107	35	31	102	330	506	836	34.8	—	—	19	—	—	—	—	—	—	—	—	—	—	—	12
Redbourn	24	45	18	13	53	145	187	332	13.8	1	—	76	—	1	—	4	—	—	10	5	6	0.6	6	10
Rickmansworth	22	73	38	32	59	316	109	425	19.3	1	—	118	—	—	—	—	—	—	—	—	—	—	—	6
Royston	24	32	16	13	32	186	340	526	21.9	—	—	51	—	—	—	28	—	—	—	—	4	—	—	12
Tewin and Datchworth	23	53	18	11	61	141	299	440	19.1	1	—	402	—	—	—	67	—	—	22	102	263	12.0	263	44
Ware	47	192	92	76	207	1,001	1,081	2,082	44.3	2	—	133	—	2	—	7	—	—	—	—	—	—	—	11
Watton	12	38	14	13	32	93	154	247	20.6	—	—	379	—	—	—	141	—	—	12	33	100	8.3	100	33
Welwyn	51	92	31	29	95	503	710	1,213	23.8	—	—	115	—	—	—	13	—	—	11	14	30	2.7	30	11
Codicote	44	43	15	11	54	213	327	540	12.3	—	—	50	—	—	—	18	—	—	6	8	14	2.3	12	6
Woolmer Green	21	28	10	8	27	80	203	283	13.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Welwyn Garden City (Peartree)	50	255	92	78	241	1,645	980	2,625	52.5	1	—	1,032	—	11	13	13	—	—	12	69	172	14.3	172	62
Welwyn Garden City (Lawrence Hall)	51	204	80	70	176	1,483	788	2,271	44.5	1	—	912	—	1	11	6	—	—	12	42	104	8.7	104	63
Wigginton	12	14	—	1	20	31	153	184	15.3	2	—	20	—	—	—	—	—	—	—	1	2	—	—	12
Watford Home	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	52	74	168	3.2	84	52
Totals	895	2,497	1,031	871	2,440	12,658	14,315	26,973	30.1	14	95	8,180	389	110	293	1,469	627	5.0	1,378	627	1,469	5.0	1,378	694

TABLE 20.  
GIVING PARTICULARS OF ATTENDANCES AT VOLUNTARY WEIGHING  
CENTRES DURING 1934.

Centre.	No of Times Centre Open.	No. of Mothers Attending.	No. of children who at- tended Centre for first time during 1934 and who on the date of their first attendance were (a) Under 1 year of age. (Ex- cluding) those known to have attended Centre in another district previous- ly.	(b) between 1 and 5 years of age.	No. of Children who at- tended Centre during 1934 and who at the end of the year were (a) Under 1 year of age.	(b) Between 1 and 5 years of age.	No. of Attendances at Centre by Children:— (a) Under 1 year of age. (b) Between 1 and 5	Total Children's Attendances.	Average Attendance of Children.	No. of Deaths of Children.	No. of Children who had Orthopaedic Treatment.	No. of Talks given at Centre.
Bushey . . . . .	44	105	59	8	54	91	1073	1639	37.3	—	1	3
Croxley Green . . . . .	11	43	23	1	18	25	112	186	16.9	—	—	11
Cuffley . . . . .	23	24	15	6	15	15	155	231	10.0	—	—	—
Great and Little Amwell High Cross . . . . .	11	13	7	1	5	15	48	88	8.0	—	—	—
King's Walden . . . . .	12	36	11	2	11	41	39	183	15.3	1	1	—
St. Albans (The Camp) St. Albans (St. Johns)	42	17	3	3	1	25	65	504	12.0	—	—	—
Stanstead Abbots . . . . .	26	99	36	3	23	96	476	990	38.1	2	3	—
Weston . . . . .	26	60	21	3	15	56	293	646	24.8	—	4	—
Wheatthampstead . . . . .	22	35	19	3	17	28	117	210	9.5	—	2	—
	12	27	7	2	6	30	59	294	24.5	—	—	—
	18	32	11	3	9	31	54	186	10.3	—	—	—
Total . . . . .	247	491	212	35	174	453	2491	5157	20.9	3	11	14



these districts. At most of these voluntary centres useful ante-natal care and supervision are being carried out. There is no doubt that much of the excellent voluntary work given to the care and attention of mothers and infants at these voluntary centres has in large measure assisted in securing the low figure of infant mortality, which is a feature of the statistics for 1934.

In the accompanying tables particulars are given of the work carried out at the voluntary centres and weighing centres.

**Maternity Beds.**—Accommodation for maternity cases under the Maternity and Child Welfare Scheme of the County Council is provided at the Watford Maternity Home (21 beds), West Herts Hospital (8 beds), the Maples, Hitchin (7 beds), and the County Hospital, Hertford (6 beds). In addition there are a number of beds provided in the various County Institutions. There is an excellent maternity unit at the Wellhouse Hospital, Barnet. Arrangements are also made for the admission of complicated maternity cases to the Addenbrooke's Hospital, Cambridge, from the northern part of the County. Maternity beds are now available at the Bishop's Stortford voluntary hospital; and additional maternity beds to the number of 15 will shortly be provided at Oster House, St. Albans.

**Consultations.**—Mr. Ellison, the consulting obstetrical surgeon, reports as follows regarding his work during the year :—

In all 61 visits were paid to patients during 1934 as against 41 in 1933.

Of these 43 were made to patients before or during delivery. In 12 of these cases the pelvic measurements were small, and in six there were definite disproportion between the head of the infant and the inlet of the pelvis at or about full term, so Cæsarian section was performed. Cæsarian section was performed in four other cases, twice for pregnancy complicated by fibroids in which case myomectomy was performed at the same time, while in the other the number of the fibroids necessitated a partial hysterectomy. Of the other two Cæsarian sections, one was for repeated still-births, the other for eclampsia. In all these cases both the mother and the child progressed satisfactorily. There have been no deaths in patients who were seen in consultation during the ante-natal period.

Eighteen visits were paid to patients after delivery. Fourteen of these cases were suffering from puerperal fever. Treatment was instituted but one died. The only other death was in the case of a recently delivered woman who was suffering from miliary tuberculosis. The other four visits were paid to patients

TABLE 2I

PARTICULARS OF CHILDREN UNDER FIVE YEARS OF AGE WHO ATTENDED THE CENTRES IN 1934 COMPARED WITH THOSE OF 1933. (Dr. Swatman's District.)

Centre.	No. of times open.		No. of children on the books in		No. of attendances of children in		No. of deaths of children in		No. of children who had Orthopædic treatment in		No. of children who had Dental treatment in		No. of Mothers' attendances in 1934.		No. of Mothers who had Dental treatment in	
	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.
Bishop's Stortford	49	49	169	146	2,670	2,407	1	1	3	8	3	9	124	1,986	1	6
Hatfield .	44	46	162	128	1,198	1,006	—	—	7	6	2	—	104	965	—	—
Hitchin .	49	48	345	365	2,689	3,287	3	2	21	22	12	10	301	2,217	2	2
Letchworth	48	52	335	336	3,388	3,417	2	2	8	14	6	10	268	2,987	—	5
St. Albans .	51	51	643	640	4,971	4,921	10	5	36	40	56	84	531	4,307	3	10
Stevenage .	45	46	193	163	1,320	1,290	—	2	6	6	8	21	144	979	11	4
	286	292	1,847	1,778	16,236	16,330	16	12	81	96	87	134	1,472	13,441	17	27



TABLE 22

PARTICULARS OF EXPECTANT, MOTHERS WHO ATTENDED THE ANTE-NATAL CLINICS IN 1934 COMPARED WITH  
THOSE OF 1933. (Dr. Swatman's District.)

Centre.	No. of times open.		No. of expectant mothers on books in		No. of consultations of these with Medical Officer in		Average number of consultations each clinic in		No. of deaths amongst expectant mothers in		No. of expectant mothers referred to Dental Clinic in		No. of post-natal consultations in		No. of normal mothers on books in		No. of expectant mothers with abnormal conditions dependent on pregnancy in		No. of expectant mothers with abnormal conditions not dependent on pregnancy in	
	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.
Bishop's Stortford	20	19	11	14	20	37	1	2	—	—	—	1	24	28	3	—	4	10	5	4
Hatfield . . .	22	20	25	32	58	89	3	4	—	—	—	3	20	24	11	6	9	10	7	14
Hitchin . . .	48	48	239	240	802	790	18	17	—	—	5	5	90	100	83	36	97	94	62	104
Letchworth . . .	23	23	29	41	86	116	5	5	—	—	1	—	61	69	7	8	7	6	18	22
St. Albans . . .	23	23	87	91	259	241	11	11	—	—	5	4	82	90	36	25	22	22	40	49
Stevenage . . .	28	34	25	28	56	65	2	2	1	—	1	—	29	72	9	2	4	2	14	19
	164	167	416	446	1,281	1,338	5	7	1	—	12	13	306	383	149	77	143	144	146	212

suffering from conditions complicating the puerperium—all of these recovered.

**Massage and Orthopædic Centres.**—During the year 1934 the number of defects and morbid conditions dealt with in children under 5 years of age who attended and received treatment at the massage and orthopædic centres in the County was 325. Of this number there were 165 cases of acquired deformity of the lower limb, 66 cases of congenital deformity of the lower limb, and 32 cases of morbid conditions or defects involving muscles and tendons.

**Dental Treatment.**—The treatment carried out during the year in the case of mothers and in children under 5 years of age is shown as follows :—

Mothers and children inspected by the Dentists . . . . .	523
Found to require treatment . . . . .	510
Actually treated . . . . .	470
Attendances made for treatment . . . . .	634
Fillings . . . . .	50
Extractions . . . . .	1,486
Administrations of general anæsthetic for extractions . . . . .	398
Other operations . . . . .	20

#### DR. SWATMAN'S REPORT.

During 1934 the numbers at the Centres have been well maintained. More children attended the Centres, but the number of their attendances was slightly less. The hot, dry summer weather no doubt kept many children from attending, and there were several epidemics—whooping-cough, measles, and diphtheria—in the various districts, which contributed considerably to the lessening of attendances. In spite of these the average weekly attendance of children at the Centres, regarded as a whole, was the same as in 1933, i.e. 56.

The ante-natal clinics were carried out in the same manner as in 1933. The number of expectant mothers attending and the number of their attendances were slightly smaller than during the previous year. At one centre this was accounted for by changes in the Health Visiting Staff. There was one maternal death.

As in previous years much valuable work has been done at the Centres by voluntary helpers, to whom very many thanks are due.

The actual figures for the various Centres are given in the accompanying tables.



TABLE 23.  
GIVING PARTICULARS OF CHILDREN UNDER 5 YEARS OF AGE WHO ATTENDED THE CENTRES IN 1934,  
COMPARED WITH THOSE IN 1933. (Dr. Ornstein's District.)

Centre.	No. of times the Centre was opened in		No. of children on the books in		No. of attendances of children in		Average weekly attendance of children in		No. of deaths of children in		No. of children who had orthopaedic treatment in		No. of children referred to Den- tal Clinics in		No. of nursing mothers referred to Den- tal Clinics in		No. of defects and ailments in	
	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.		
Barnet . . . . .	47	48	398	362	2,837	3,123	60	65	2	1	1	1	21	4	48	75		
Hemel Hempstead . . . . .	50	51	223	209	2,121	1,637	42	32	3	4	—	—	—	—	20	19		
Hertford . . . . .	50	51	333	320	2,392	2,473	48	48	1	1	—	—	5	—	51	75		
Waltham Cross . . . . .	51	50	346	340	3,235	2,938	63	59	1	1	2	—	11	—	40	35		
Ware Voluntary Centre . . . . .	47	47	397	264	1,943	2,053	41	44	2	4	1	1	2	2	21	33		
Total . . . . .	245	247	1,697	1,495	12,528	12,224	51	49	9	11	4	—	39	6	180	237		

TABLE 24

GIVING PARTICULARS OF EXPECTANT MOTHERS WHO ATTENDED THE ANTE-NATAL CLINICS IN 1934,  
 COMPARED WITH THOSE OF 1933. (Dr. Ornstein's District.)

	No. of times Clinic opened in		No. of expectant mothers on books in		No. of consultations of these with Medical Officer in		Average number of consultations of expectant mothers in		No. of deaths amongst expectant mothers in		No. of expectant mothers referred to Dental Clinics in		No. of post-natal consultations in		Normal expectant mothers in 1934.		Expectant mothers with abnormal conditions dependent on pregnancy in 1934.		Expectant mothers with abnormal conditions not dependent on pregnancy in 1934.		Percentage of normal confinements in	
	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	Normal confinement.	Abnormal confinement.	Normal confinement.	Abnormal confinement.	Normal confinement.	Abnormal confinement.	1934.	1933.
Ante-Natal Clinic.																						
Barnet.	24	24	76	62	259	192	11	8	—	—	6	1	6	53	1	5	—	—	—	—	96	84
Berkhampstead.	22	22	50	55	181	190	8	9	—	—	—	—	11	37	—	—	2	—	—	—	87	95
East and New Barnet.	22	22	109	108	392	391	18	18	2	—	10	—	48	68	—	11	2	—	—	—	86	82
Hemel Hempstead.	48	48	32	19	113	71	2	1	—	—	—	—	11	13	—	1	2	—	—	—	88	93
Hertford.	49	49	87	85	370	343	8	7	—	2	13	—	6	48	—	2	1	1	1	—	92	86
Tring.	23	23	55	48	169	181	7	8	—	—	—	—	9	26	—	6	3	—	—	—	74	78
Waltham Cross.	25	24	80	68	254	225	10	9	—	1	8	—	10	52	—	8	2	2	2	—	84	93
Ware Voluntary Centre.	22	23	103	95	265	282	12	12	—	—	7	—	5	73	—	6	1	—	—	—	89	85
Total.	235	235	592	540	2,003	1,875	9	8	2	3	44	1	97	370	40	12	16	3	88	86		



TABLE 25.

GIVING PARTICULARS OF CHILDREN UNDER 5 YEARS OLD WHO ATTENDED THE CENTRES IN 1934 COMPARED WITH THOSE IN 1933. (Dr. Sparrow's District.)

Centre.	No. of times the Centre was open in		No. of children on the books in		No. of attendances of children in		Average weekly attendance of children in		No. of deaths of children in		No. of children who had Orthopaedic treatment in 1934.	No. of children referred to Dental Clinic in 1934.	No. of Nursing Mothers referred to the Dental Clinics in 1934.	No. of Defects and Ailments in	
	1924.	1933.	1934.	1933.	1934.	1933.	1934.	1933.	1934.	1933.				1934.	1933.
Berkhampstead .	48	49	213	245	1,932	2,202	40	45	2	1	—	10	—	14 defects in 30 patients among 33 patients	13 defects in 30 patients among 38 patients.
Tring . . .	46	46	150	148	1,530	1,836	35	40	—	—	—	13	—	17 defects in 33 patients among 38 patients	18 defects in 38 patients.
Total . . .	94	95	363	393	3,462	4,038	36	42	2	2	—	23	—		

## DR. ORNSTEIN'S REPORT.

The same sessions, both at the ante-natal clinics and the Child Welfare Centres, were again held during the year.

The attendance at the ante-natal clinics showed an increase, being 2,003 as compared with 1,875 for last year. The percentages of midwifery cases taken by the nurses assisting at the clinics who attended were : Barnet, 100 per cent, East Barnet 100 per cent, Berkhamstead 100 per cent, Waltham Cross 98 per cent, Ware Voluntary Centre 91 per cent, Tring 90 per cent, Hertford 60 per cent, Hemel Hempstead 49 per cent.

The attendances at the Child Welfare Centres too were increased. Nine deaths occurred amongst those children, one of meningitis, two of congenital heart disease, and six of broncho-pneumonia, which still continues to take its toll.

Immunization against diphtheria was started at the Welfare Centres during the year. Ninety-six children attended for this purpose, divided amongst the following clinics : Hertford 29, Barnet 32, Waltham Cross 13, Hemel Hempstead 8, Ware Voluntary Centre 14.

The figures relating to the Centres are given in the following tables.

---

*HEALTH VISITORS, NURSES, AND MIDWIVES.*

The duties of the district nurse are now many and varied and each year sees some additional work and responsibility placed upon her. Under official schemes it is unfortunately unavoidable as things are at present that the nurse should be called upon to undertake increased clerical duties. It is necessary to remember, however, that the duties of the nurse are primarily to nurse the sick, and it is therefore not to the benefit of the sick person if the time and efforts of the nurse are diverted to any great extent to extraneous matters of a clerical character.

The standard of work of the district nurses in regard to midwifery, sick nursing, and special services is highly satisfactory, and the majority of them show a commendable keenness to increase their knowledge and efficiency. One is impressed by the excellence of some of the reports which are submitted from time to time ; they show a true appreciation of the importance of their duties and of the value of thoroughness.

The aim of the County Council and of the County Nursing Association has been to secure that every nurse and midwife



in the County should be fully trained in general nursing. The advance which has been made in this direction is indicated by the following figures. In 1922 the percentage of fully trained nurses employed by district Nursing Associations was 40, in 1935 out of 145 nurses employed 91 or 64 per cent were fully trained. This shows what improvement has been obtained by the County Nursing Association in the standard of training of nurses in the county.

In the following report Miss Harrington, the County Health Visitor, Inspector of Midwives, and County Superintendent of Nurses, gives full particulars of the work of the health visitors, nurses, and midwives during the year.

---

*ANNUAL REPORT OF THE INSPECTOR OF MID-  
WIVES AND INSPECTOR OF HEALTH VISITORS  
FOR THE YEAR 1934.*

During the year 1934 the Health Visiting work has been carried out by the 116 Health Visitors, including three whole-time County Council Nurses.

4,246 of the 5,271 babies born alive during 1933 (excluding Watford Urban District) have been visited by the Health Visitors, a percentage of 80·6.

Of the babies visited, 75 died before reaching the age of one year, showing a mortality of 17·7 per 1,000; 790 babies left the County before completing their first year. In all cases where the address could be obtained, it was forwarded to the local Health Authority.

From the Health Visitors' returns it is shown that 2,545 or 59·9 per cent of the infants were breast-fed; 1,122 or 26·4 per cent were partly breast-fed; and 488 or 11·5 per cent were bottle-fed; 952 or 22·4 per cent used dummies; 1,229 or 28·9 per cent were vaccinated; 3,271 or 77·0 per cent were up to the average weight.

The work of the Health Visitors is shown in Table 26.

STATEMENT OF WORK AS INSPECTOR OF MIDWIVES AND HEALTH  
VISITORS FOR THE YEAR 1934.

Inspection of Midwives and Special Visits . . . . .	1,656
Visits to Health Visitors, Nurses, and Doctors . . . . .	984
Attendances at Committee Meetings . . . . .	103
Attendances at County Council and Voluntary Infant Welfare Centres and Schools . . . . .	288
Letters, circulars, etc., under the Midwifery Act and Notification of Births Act . . . . .	13,381

### STATISTICS OF MIDWIVES PRACTISING IN THE COUNTY.

There were 227 trained midwives practising in the County on 1st January, 1935. In addition, there were 35 temporary midwives and 51 who have left or retired, making a total of 313 practising in 1934.

Of those in practice on 1st January, 1935, 40 are in private practice and 135 work for Nursing Associations. Three are employed by the County Council and 49 are in institutions.

In 1934 the total number of births was 5,947 excluding still-births. The midwives attended 5,131 cases. Of these, 1,968 were with a doctor engaged and included 72 or 3·6 per cent still-births; 3,163 were attended by the midwives alone and included 43 or 1·3 per cent still-births.

The number of infants who died before the tenth day was 25 in midwives' cases born alive, being a mortality of 8 per 1,000. Of the 25 infants who died before the tenth day, 10 were premature. In addition to these cases, the midwives attended 129 abortions with a doctor.

1,503 expectant mothers have attended ante-natal clinics. The number of ante-natal visits paid by the midwives was 18,539.

**Maternal Mortality.**—In the 3,163 cases attended by the midwives, there were four maternal deaths, or 1·2 per 1,000.

**Medical Aid and any other Notifications Received.**—The number of medical aid notices was 802 or 25·4 per cent.

**Infant Life Protection.**—The following figures give particulars of the number of persons registered under the Children and Young Persons Acts for the reception of children under the age of nine :—

Number of Children in care of Foster Mothers 1st January, 1934	337
Number of Children placed under Foster Mothers during year 1934	288
Number of Children removed from care of Foster Mothers during 1934	302
Number of Children in care of Foster Mothers 31st December, 1934	323
Number of new Foster Mothers registered during year 1934	78
Number of Foster Mothers having children under their care on 31st December, 1934	245
Number of Foster Mothers not found to be suitable for registration during 1934	6
Number of Certificates of Registration cancelled during 1934	1

As regards the work carried out by the Infant Protection Visitors, the following information has been given me by Miss Harrington for 1934 :—

Number of children under supervision during year	545
Total number of visits paid	3,460
Number of forms giving home conditions	139



TABLE 26.

TABLE OF HEALTH VISITORS' WORK CARRIED OUT UNDER THE NOTIFICATION OF BIRTHS ACT, 1907-1915.

District and Health Visitors.	Parishes in each District.	Population Covered.	No. of New Homes Visited.	No. of Babies under Supervision, 31st Dec., 1934.	Health Visits to Mothers and Babies.	Health Visitors' Attendances at Maternity Centre.	No. of Cases as Midwife and Maternity Nurse and Visits.	No. of Children aged 1-5 under Supervision, 31st Dec. 1934.	Visits to These.
No. 1 : Miss Milner .	Barnet, Arkley, Totteridge .	16,850	166	120	1,175	47		502	1,663
No. 2 : Miss Shore .	Tring Urban District .	4,488	45	48	701	45	38 cases 754 visits	164	766
No. 3 : Miss Wells .	Letchworth and Willian .	14,600	129	160	1,565	49		444	1,488
Nurses working under the County Nursing Association.		311,835	4,109	4,706	64,355	2,292		14,157	74,713
	Total	347,773	4,449	5,034	67,796	2,433		15,267	78,630

TABLE 27.

## MIDWIVES AND THEIR WORK FOR THE YEAR 1934.

DISTRICT.	POPULATION.	TOTAL BIRTHS.		BIRTHS ATTENDED BY MIDWIVES.		INFANTS' DEATHS.			NOTIFICATIONS.				MATERNAL DEATHS FOR WHOLE COUNTY. MIDWIVES.	NUMBER OF MIDWIVES.				
		Legitimate.	Illegitimate.	Midwife.	With Doctor.	Under one Year.	Rate per 1,000.	Midwives' cases under Ten Days.	Medical Aid.		Stillbirths.			Private.	Nursing Associations.	County Council.	Institutions.	
									Mother.	Child.	With Doctor.	Midwife.						
Urban.																		
1. Baldock ... ..	3,381	56	2	29	27	3	51·7	...	4	2	2	2	...	1	2	...	...	
2. Barnet ... ..	16,850	193	10	117	42	7	34·4	...	11	4	2	...	...	2	1	...	15	
3. Berkhamstead	8,477	89	5	64	23	8	85·1	...	9	1	2	2	...	1	3	...	...	
4. Bp's. Stortford	10,400	134	7	65	45	10	70·9	...	11	3	1	1	...	...	4	...	6	
5. Bushey ... ..	11,750	153	5	75	12	8	50·6	1	17	2	1	1	...	...	1	...	...	
6. Cheshunt ... ..	15,320	196	6	85	93	14	69·3	...	13	1	6	1	...	5	4	...	...	
7. Chorleywood...	3,395	33	2	13	12	2	57·1	...	3	1	1	1	...	...	1	...	...	
8. E. Barnet Valley	21,540	314	3	139	54	11	34·7	1	43	8	4	1	1	2	5	...	1	
9. Harpenden ... ..	9,160	75	7	54	29	2	24·3	...	22	...	...	1	...	...	4	...	...	
10. H. Hempstead	15,940	222	5	155	59	9	39·6	1	15	2	3	1	...	1	3	...	4	
11. Hertford ... ..	12,290	147	9	106	41	4	25·6	2	32	4	...	...	...	1	5	...	5	
12. Hitchin ... ..	15,220	188	10	91	102	5	25·2	...	46	11	3	1	...	3	3	2	4	
13. Hoddesdon ... ..	7,792	143	5	97	56	4	27·0	1	22	2	2	...	...	2	3	...	...	
14. Letchworth ... ..	14,390	193	7	84	99	4	20·0	1	15	2	5	2	...	4	2	...	...	
15. Rickmansworth	11,680	159	3	114	37	7	43·2	1	14	7	...	3	1	1	4	...	...	
16. Royston ... ..	3,781	43	2	25	14	1	22·2	...	5	1	1	...	...	...	1	...	...	
17. St. Albans ... ..	30,980	402	12	225	171	20	48·3	1	31	7	6	1	...	4	8	...	4	
18. Sawbridgeworth	2,840	28	1	10	17	2	68·9	...	6	...	...	...	...	...	2	...	...	
19. Stevenage ... ..	5,696	32	4	41	34	4	46·5	...	7	...	...	...	...	...	2	...	...	
20. Tring ... ..	4,488	60	2	22	28	...	...	...	1	...	3	...	...	1	...	1	...	
21. Ware ... ..	6,685	116	3	86	39	6	50·4	2	12	1	3	...	...	...	3	...	3	
22. Watford ... ..	57,800	768	40	495	273	31	38·3	6	190	11	6	15	1	6	9	...	5	
23. Welwyn G'n C.	9,445	186	5	79	96	3	15·7	...	18	1	...	3	...	...	4	...	2	
Total for U.D's. ...	299,300	3,980	155	2,271	1,403	165	39·9	17	547	71	51	36	3	34	74	3	49	
Rural.																		
1. Ashwell ... ..	3,546	57	2	26	21	1	16·9	1	10	4	1	...	...	1	3	...	...	
2. Barnet ... ..	6,896	122	4	71	46	3	23·8	...	...	2	...	1	...	1	3	...	...	
3. Berkhamstead	5,328	61	1	34	12	4	64·5	...	7	...	1	...	...	...	4	...	...	
4. Buntingford ... ..	4,581	42	4	28	7	1	21·7	...	11	2	...	...	...	...	1	...	...	
5. Hadham ... ..	5,476	70	2	45	23	2	27·7	...	6	...	1	2	...	...	3	...	...	
6. Hatfield ... ..	12,610	188	6	50	73	7	36·0	...	7	...	2	...	...	1	5	...	...	
7. H. Hempstead	8,720	134	4	89	47	7	50·7	...	14	5	2	...	1	...	6	...	...	
8. Hertford... ..	7,655	81	4	46	30	3	35·2	...	8	2	1	...	...	...	5	...	...	
9. Hitchin... ..	14,710	184	8	114	58	9	46·8	2	18	5	4	1	...	...	8	...	...	
10. St. Albans ... ..	21,670	306	7	132	69	10	31·9	1	26	4	3	2	...	...	6	...	...	
11. Ware ... ..	13,590	183	5	98	68	2	10·6	...	20	1	3	...	...	3	9	...	...	
12. Watford ... ..	21,230	286	5	134	102	9	30·9	2	19	3	3	1	...	...	7	...	...	
13. Welwyn ... ..	4,040	45	1	25	9	2	43·4	2	8	2	...	...	...	...	1	...	...	
Total for R.D's. ...	130,050	1,759	53	892	565	60	33·1	8	154	30	21	7	1	6	61	...	67	
Total for U.D's. ...	299,300	3,980	155	2,271	1,403	165	39·9	17	547	71	51	36	3	34	74	3	49	
Total for County	429,350	5,739	208	3,163	1,968	225	37·8	25	701	101	72	43	4	40	135	3	49	



The inspection which is carried out in connection with infant life protection is of definite benefit. The assistance of the Inspectors of the N.S.P.C.C. has proved of much value in dealing with difficult cases. It is somewhat difficult to get foster-mothers to adhere to the law in regard to the notices they have to send ; they have to be constantly reminded.

### *SANITARY SERVICES IN THE COUNTY.*

The following is an up-to-date summary of the sanitary and special services provided by Local Sanitary Authorities in the County.

#### *Urban Districts.*

##### **BALDOCK.**

Water Supply	.	Adequate supply from First Garden City, Ltd., Pumping Station for practically whole district ; few wells.
Sewage Disposal	.	Public system for whole district ; disposal works near Icknield Way. Sewage enters large tank after screening and is pumped into a reservoir twice daily, and then run on to land under cultivation and treated by systematic broad irrigation.
Refuse Collection and Disposal.		Once weekly in open horse-drawn conveyance. Existing dump has been overhauled and disposal is now carried out on the controlled System.
Infectious Diseases	.	Cases sent by arrangement to Letchworth Urban and Hitchin Rural Hospital ; swabs examined at County's Public Health laboratories ; antitoxin supplied when required ; no steam disinfectors provided ; clothing and houses disinfected with paraformaldehyde and formalin and liquid disinfectants.
Housing	.	Fifty-two houses erected by private enterprise.

##### **BARNET URBAN.**

Water Supply	.	Public supply for the whole district from the Barnet and District Gas and Water Co., from wells sunk into the chalk ; the supply is adequate.
Sewage Disposal	.	Water carriage system for the whole district except in older portions of district, where combined system obtains. Certain outlying properties are drained to cesspools ; part of Totteridge is drained into Finchley sewer. Sewage Farm is situated in Mays Lane, and is 56 acres in extent ; method of disposal : three rotary filters, detritus and sedimentation tanks, and land irrigation ; pumping is necessary for one sewer ; some extension of the system is contemplated.
Refuse Collection and Disposal.		Weekly collection for whole district in covered mechanical conveyances ; partly controlled.

- Infectious Diseases . Cases of infectious diseases removed to Barnet Joint Isolation Hospital; swabs examined by arrangement with Clinical Research Association; supplies of antitoxin kept for local practitioners. A steam disinfectant is available; houses are fumigated with formaldehyde.
- Housing . . The Council's Housing Estates comprise 538 houses and flats and 4 shops.  
In addition 34 houses are in course of erection for the purpose of rehousing persons who are being displaced under a Slum Clearance Order, and also for rehousing persons from 12 houses which have been purchased by the Council for demolition for purposes of road improvement.

## BISHOP'S STORTFORD URBAN.

- Water Supply . Adequate supply from deep wells, which serves whole district.
- Sewage Disposal . Public system for greater part of district; there are now only 10 cesspools. Sewage gravitates to tanks, is screened and pumped on to high level, and is dealt with by broad land irrigation; effluent to River Stort. Extension of land for irrigation may be necessary at some future date. Disposal works outside district in Essex.
- Refuse Collection and Disposal. Weekly in covered horse-drawn conveyance; partly controlled.
- Infectious Diseases . Cases admitted by special arrangement to Isolation Hospital; swabs sent to laboratory at Hill End Mental Hospital; antitoxin kept at Isolation Hospital; steam disinfectant at Isolation Hospital; houses disinfected with formaldehyde.
- Housing . . Thirty-eight houses in course of erection.

## BUSHEY URBAN.

- Water Supply . Adequate supply for whole district from Colne Valley Water Co.
- Sewage Disposal . Public system for whole district with the exception of the northern part and a few small areas. Disposal works have recently been extended, and are now capable of dealing with sewage from population of 17,000; anærobic and ærobic methods of treatment are adopted; percolating filters and filtration through sand; experiments as to digestion of sludge being carried out.
- Refuse Collection and Disposal. Weekly collection in covered mechanical conveyance. Disposal by controlled tipping.
- Infectious Diseases . Cases admitted to Watford Joint Hospital, which serves district; swabs sent to Clinical Research Association; antitoxin kept by Council. Steam disinfectant at Isolation Hospital. Houses disinfected by Sanitary Inspector.
- Housing . . Total number of houses owned by Local Authority is 174. The general standard of housing in the district is good.



## CHESHUNT URBAN.

Water Supply	.	Public supply for practically whole district from Metropolitan Water Board, private wells in a few country houses.
Sewage Disposal	.	Public system for whole district except some country houses. Sewage disposal works on Cheshunt Marsh in Parish of Enfield, consists of septic tanks, revolving sprinklers, humus tanks, and filtration over several acres of ground.
Refuse Collection and Disposal.		Weekly collection in covered mechanical conveyance ; disposal partly controlled.
Infectious Diseases	.	Cases removed to Cheshunt Isolation Hospital ; examination of swabs arranged by M.O.H. Antitoxin kept at U.D.C. Offices and house of M.O.H. No local disinfecter available, but there are arrangements for disinfection with Enfield ; house disinfection by formalin lamps.
Housing	.	None under Housing Acts, but 145 by private enterprise.

## CHORLEYWOOD URBAN.

Water Supply	.	Adequate supply for practically the whole district from the Rickmansworth and Uxbridge Valley Water Co. ; three private wells.
Sewage disposal	.	Public system for greater part of district. Few cesspools. Disposal works at Maple Cross consist of detritus and screening chamber, two sedimentation tanks, three primary and secondary filters, and two humus tanks ; effluent to tributary of River Colne.
Refuse Collection and Disposal.		Collection weekly in covered mechanical conveyance.
Infectious Diseases	.	Cases admitted to Joint Hospital serving district swabs sent to Clinical Research Association. Antitoxin kept by Council. Steam Disinfecter at Isolation Hospital ; houses disinfected by Sanitary Inspector.
Housing	.	Total number of houses owned by Local Authority, 57. The standard of housing in the District is very good.

## BERKHAMPSTEAD URBAN.

Water Supply	.	Public supply for practically the whole district from the Berkhamstead Water Company, which also supplies adjoining districts ; supply is adequate ; there are a few wells.
Sewage Disposal	.	Conservancy system for whole district ; sewage disposal works at Broadway, Berkhamstead, consist of septic tanks and rotary percolating filters, effluent discharged to Grand Union Canal ; system also serves Northchurch Village, Berkhamstead Rural.
Refuse Collection and Disposal.		Weekly collection for whole district in covered carts with automatic covers. Controlled system of disposal.
Infectious Diseases		Cases admitted to Aldbury Hospital ; swabs sent to Clinical Research Association or Hill End laboratory. Obtainable from Medical Officer of Health, Town Hall, Hemel Hempstead ; anti-toxin supplied by Council through Sanitary

	Inspector; steam disinfecter available; disinfection carried out by sanitary staff.
Housing . . .	Forty-six houses completed under Housing Acts during 1931; 20 new houses erected in 1933; 11 Council Houses commenced in 1934, and to be completed in 1935, to rehouse displaced tenants of condemned houses.
EAST BARNET VALLEY.	
Water Supply . . .	Adequate supply from the Barnet District Gas and Water Co. from wells and borings; whole district served.
Sewage Disposal . . .	Public system for whole of district except for a very small number of large houses in isolated positions. Disposal works situated at Brunswick Park Road at junction with Osidge Lane, sewage conveyed by five main outfall sewers; the sewage from two of these passes through pyramidal settlement tanks and then on to the land; the sewage from the remaining three sewers passes direct on to the land; the site is under drained, all drains leading to settling tanks which feed a series of percolating filters. The effluent is discharged into Pymmes Brook. A scheme of new construction in connection with sewage disposal at an estimated cost of £81,000 has been approved by the Council.
Refuse Collection and Disposal.	A weekly collection of domestic and trade refuse is made over the whole of this district. Producers of offal, and offensive trades, receive three collections a week. In October, 1934, three new refuse collecting vehicles were brought into operation to replace the old system of tractor and trailers. The vehicles are of 15 cubic yards capacity rear loading and fitted with moving floors. Since the introduction of these vehicles a very considerable improvement has been effected in the method and cleanliness of the collection. The method of disposal is "Controlled Tipping" at Oak Hill Park, East Barnet. Since the inception of the scheme about 8,000 tons of refuse have been disposed of without a complaint of any description. No vermin or flies have been found since the controlled tip was begun in April, 1933.
Infectious Diseases . . .	Cases to Barnet Joint Isolation Hospital; swabs sent for examination to Clinical Research Association; supplies of antitoxin kept by Council. Steam disinfecter available at Isolation Hospital. Rooms and contents sprayed with formalin.
Housing . . .	No Council houses were built during the year; 270 houses were built by private enterprise. The question of slum clearance has been under consideration and it is proposed that clearance schemes be considered in respect of eight small areas comprising 35 houses in all.



## HARPENDEN.

- Water Supply . Adequate supply from Harpenden Water Co from deep wells for almost whole district ; a few wells. Company also supplies Wheathampstead and Batford.
- Sewage Disposal . Public system except for outlying farms and houses. Disposal works on eastern boundary of district. Slate beds, tanks, and percolating filters ; also serves part of St. Albans Rural District.
- Refuse Collection and Disposal. Weekly collection in covered conveyance ; partly controlled tipping.
- Infectious Diseases . Cases to St. Albans Hospital ; swabs, etc., sent to laboratory at Hill End Mental Hospital. Anti-toxin kept by Council. Disinfector available at St. Albans Isolation Hospital, to which clothes are sent. House disinfection by formalin spray and lamps.
- Housing . . The Council have erected 72 houses. Financial assistance to Workmen's Housing Association for the erection of 72 houses, which were completed in August, 1932. Loans to owner-occupiers under the Small Dwellings Acquisition Acts in respect of 355 houses. Tenders for 36 additional houses have been accepted by the Council.

## HEMEL HEMPSTEAD BOROUGH.

- Water Supply . Adequate supply from two borings for whole district, with the exception of about a dozen houses, mostly at Bourne End ; also supplies parts of St. Albans Rural District (Leverstock Green) and Watford Rural District (portion of Nash Mill District).
- Sewage Disposal . Public system except for outlying farms and cottages ; disposal works at Bennett's End ; sewage is pumped from Apsley and passes through sedimentation tanks and percolating filters, and is finally treated by broad irrigation. System also serves portion of Leverstock Green in St. Albans Rural District. The Council have decided to remodel the existing sewage works on up to date lines. Plans have already been prepared for submission to the Ministry of Health.
- Refuse Collection and Disposal. Weekly collection in covered mechanical conveyance ; controlled tipping.
- Infectious Diseases . Cases to Joint Isolation Hospital ; swabs sent to laboratory at Hill End Mental Hospital. Anti-toxin supplied from Public Health Department ; steam disinfector at Isolation Hospital. Houses disinfected by formalin spray and lamps.
- Housing . . Forty-two houses were completed in 1932 ; 68 houses completed in 1933 ; 50 houses to be built in 1935.

## HERTFORD BOROUGH.

- Water Supply . Adequate supply for whole district from wells in chalk owned by Corporation ; supplies part of Hertford Rural District.

Sewage Disposal .	Public system for whole district ; disposal works within eastern boundary of borough consist of detritus tanks, sedimentation tanks, activated sludge tanks and sludge digestion. Part of Hertford Rural District is served by system.
Refuse Collection and Disposal.	Weekly, in covered freighter ; disposal by controlled tipping.
Infectious Diseases .	Cases to Hertford and Ware Joint Hospital ; swabs examined at laboratory at Hill End Mental Hospital. Diphtheria Antitoxin at The Castle. Steam disinfectant at Isolation Hospital ; houses disinfected with formaldehyde.
Housing . . .	Houses erected during 1934, 42.
HITCHIN URBAN.	
Water Supply .	Adequate public supply for whole district except small hamlet of Charlton and few houses ; new boring just been made at Temple End ; also supplies Ippollitts and Ickleford in Hitchin Rural District.
Sewage Disposal .	Public system for whole district except Charlton and few scattered houses ; extended within last two years. Disposal works at Grove Road consist of tanks and percolating filters. System also serves few scattered houses outside the Urban District.
Refuse Collection and Disposal.	Weekly collection in covered mechanical conveyance.
Infectious Diseases .	Cases sent by arrangement with the Joint Isolation Hospital ; swabs examined at cost of Council ; antitoxin supplied free of cost. Steam disinfectant at Isolation Hospital ; house disinfection by spraying disinfectant fluid followed by formaldehyde gas fumigation.
Housing . . .	New Council houses at Walsworth erected in 1932-33 ; no further rehousing schemes at present.
HODDESDON URBAN.	
Water Supply .	Adequate supply for practically whole district from deep well in chalk ; also serves small number of houses in Ware Rural District.
Sewage Disposal .	Main sewerage scheme, separate for soil and surface water ; whole district served except for few isolated houses. Disposal works in north-east of district consist of detritus and settling tanks, contact beds, and rotary percolating filters ; sewage taken from houses in Amwell Parish. Council have under consideration electrification scheme of pumping machinery and extension of works.
Refuse Collection and Disposal.	Weekly collection in covered conveyance ; disposed of in destructor ; refuse used to generate steam for sewage pumping.
Infectious Diseases .	Cases to Hertford and Ware Isolation Hospital, where clothing is disinfected ; swabs, etc., sent to laboratory at Hill End Mental Hospital. Diphtheria antitoxin kept at Council Offices. Formalin disinfection of houses.
Housing . . .	During the past year 50 houses have been completed, let at inclusive rent of 8s. 4d. ; further scheme of 78 houses contemplated.



## LEITCHWORTH.

- Water Supply . Adequate supply for whole district from pumping station ; four borings at Weston Hill ; new 6 ft. bore on Baldock-Willian road ; also supplies part of Hitchin Rural District and Baldock Urban.
- Sewage Disposal . Whole district served except for few houses and farms in isolated positions ; separate systems for sewage and surface water sewage to sewage works and surface water empties into Pix Brook. Disposal works just beyond north-western boundary in Biggleswade R.D.C. ; consist of settling tanks, with primary and secondary filtration ; effluent discharged into Pix Brook. System serves Isolation Hospital in Hitchin Urban District.
- Refuse Collection and Disposal. House refuse weekly, trade refuse daily in some instances ; covered freighters ; disposal by controlled tipping.
- Infectious Diseases . Cases admitted to Hospital of Hitchin Rural and Letchworth Urban Joint Board ; swabs sent to Thresh and Beale, London ; antitoxin kept at Isolation Hospital. Steam disinfectant at Isolation Hospital ; disinfection of houses carried out by Sanitary Inspector.
- Housing . . 1,313 houses now erected by the Council.

## RICKMANSWORTH URBAN.

- Water Supply . Adequate supply for practically whole district from Rickmansworth and Uxbridge Valley Water Co. ; a few isolated houses supplied from wells.
- Sewage Disposal . Public scheme for whole district, except Heronsgate and isolated houses. Sewage gravitates to pumping stations and is pumped on to land ; septic tanks and land irrigation. The following works are in progress :—The sewerage of the new estates at Croxley Green, the sewerage at Heronsgate, and the provision of additional pumps at the works. The Council's proposal to provide a main sewer to serve a large area of the Colne valley is under consideration.
- Refuse Collection and Disposal. Weekly in covered mechanical conveyances ; refuse disposed of by " controlled " tipping.
- Infectious Diseases . Cases to Watford Joint Isolation Hospital ; swabs sent to Peace Memorial Hospital, Watford ; antitoxin kept at Council Offices. Infected clothing sent for disinfection to Isolation Hospital ; house disinfection carried out by Council's staff.
- Housing . . Twenty-eight houses were completed during the year, bringing the total number of houses erected up to 398.

## ROYSTON.

- Water Supply . Adequate public supply for whole district.
- Sewage Disposal . Public system for whole district ; a few cesspools and earth-closets on outskirts.
- Scavenging . Weekly collection in whole district.
- Infectious Diseases . Cases to joint Hospital, but only one disease can be admitted ; swabs and antitoxin paid for if necessary.
- Housing . . 15 houses have been erected during the year 1934 by private enterprise. The Council have in view the erection of suitable houses to replace those that have been declared unfit in seven clearance areas.

## ST. ALBANS CITY.

Water Supply	.	Adequate supply for whole district from St. Albans Water Works Co. ; parts of surrounding districts also supplied.
Sewage Disposal	.	Public system for whole district ; sewage disposal works at Park Street consist of septic tanks with sprinklers and primary and secondary filtration ; some extension of the system is contemplated.
Refuse Collection and Disposal		Weekly collection in covered mechanical conveyance, daily in shopping area. Pulverizing and salvage plant ; pulverized refuse sold ; tins baled and sold.
Infectious Diseases	.	Cases admitted to St. Albans Isolation Hospital ; swabs sent to Clinical Research Association and Hill End ; antitoxin provided by Council. Steam disinfecter at Isolation Hospital ; houses disinfected by formalin lamps.
Housing	.	The number of houses erected or to be erected under the Assisted Scheme was nil, and by private enterprise 287.

## SAWBRIDGEWORTH.

Water Supply	.	Adequate supply for whole district, with the exception of the outlying hamlet of Spelbrook, from the Herts and Essex Waterworks Co. ; shallow wells at Spelbrook.
Sewage Disposal	.	Public system for whole district, with exception of Spellbrook ; sewage by gravitation to sewage farm. Disposal works in south-east of district consist of septic tanks and filter beds ; effluent to River Stort.
Refuse Collection and Disposal.		Once weekly collection in covered horse-drawn conveyance ; partly controlled tipping.
Infectious Diseases	.	Cases admitted to Isolation Hospital ; swabs sent to the County Laboratory at Hill End ; anti-toxin kept by Medical Officer of Health. Steam disinfecter at Isolation Hospital ; house disinfection by Sanitary Inspector.
Housing	.	The number of houses built and occupied during the year 1934 was 21.

## STEVENAGE.

Water Supply	.	In August the new pumps at Bromin Green were started to serve the town by pumping water up to the old waterworks at Rook's Nest, pipes having been laid to connect Bromin Green station with the distributing centre at Rook's Nest. The supply, notwithstanding the dry season, is now satisfactory in quantity and also in quality, except that from time to time there is a deposit of chalk in the water.
Sewage Disposal	.	Public system for whole town except few houses on outskirts. Disposal works are to the south of the town, adjoining Great North Road. Consists of filter beds.
Refuse Collection and Disposal.		Weekly collection in covered conveyances.
Infectious Diseases	.	Arrangements for admission of cases to Hertford and Ware Isolation Hospital ; swabs, etc., sent



to the laboratory at Hill End Mental Hospital. Antitoxin provided in necessitous cases. No steam disinfectors provided. Rooms disinfected by formaldehyde vapour or spray.

Housing . . . During the year 16 houses have been completed and are now occupied.

#### TRING URBAN.

Water Supply . . . Adequate supply from Chiltern Hills Spring Water Co. available for whole district except Bulbourne hamlet, but many houses are not connected; deep wells and also some shallow wells at Bulbourne. Adjoining district also supplied with Company's water. During the year 47 houses have been connected to the company's supply.

Sewage Disposal . . . Public system for whole district, except outlying hamlets; disposal works on west side of Tring Ford Reservoir. Sewage pumped to high level after having passed through screening and settling tanks, and is treated by broad irrigation; land is under-drained, and effluent runs into a brook running into Tring Ford Reservoir.

Refuse Collection and Disposal . . . Weekly collection in covered horse-drawn conveyance; partly controlled tipping.

Infectious Diseases . . . Cases to Urban District Isolation Hospital; swabs, etc., sent to Clinical Research Association; antitoxin at office of Sanitary Inspector. Steam disinfectors at Isolation Hospital; houses disinfected with formalin lamps.

Housing . . . Twenty-four houses have been erected by the Workmen's Housing Association, and are let at a rent of 4s. 7d. per week exclusive of rates, the Council to have choice of tenants; no Council houses contemplated at present.

#### WARE URBAN.

Water Supply . . . Adequate supply for whole district from deep wells the property of the Council; also supplies portion of adjoining rural area.

Sewage Disposal . . . Public system for whole district; disposal works at Rye Farm, near Hoddesdon, which consists of 140 acres; sewage pumped from pumping station at Stanstead Abbots to farm, treatment by broad irrigation. System also serves adjoining rural area.

Refuse Collection and Disposal . . . Weekly collection in covered mechanical conveyance; disposal by controlled tipping.

Infectious Diseases . . . Cases admitted to Joint Isolation Hospital; swabs, etc., are sent to the laboratory at Hill End Mental Hospital. Antitoxin kept at Isolation Hospital. Steam disinfectors at Isolation Hospital to which infected clothing is sent. Houses disinfected by Sanitary Inspector.

Housing . . . The number of houses constructed in 1934 was 16. In addition there are 94 houses contemplated under the 1925 and 1930 Housing Acts.

#### WATFORD BOROUGH.

Water Supply . . . Adequate supply for whole district mainly from deep wells owned by Corporation. Oxhey

supplied by Colne Valley Water Works Co., and Garston supplied by Rickmansworth and Uxbridge Valley Co. Part of Watford Rural supplied.

- Sewage Disposal . Public System for whole district. Disposal works at Holywell Farm, 130 acres ; 40 acres retained for system of intermittent downward filtration, a further 40 acres being kept in reserve. There were 314 cesspools at Garston, but these are being abolished as the main sewer has been constructed to this district. The Corporation is emptying free of charge to the remaining cesspool owners until all possible connections are made with the sewer.
- Refuse Collection and Disposal. Collection once per week in covered mechanical conveyances ; in special cases collection once daily ; disposal by destructor.
- Infectious Diseases . Cases admitted to Isolation Hospital ; swabs now sent to Peace Memorial Hospital ; antitoxin kept at Council Offices. Steam disinfectant at Isolation Hospital ; houses disinfected by Sanitary Inspectors with formalin and spraying.
- Housing . . 207 houses have been completed in 1933 and 1934 for rehousing and slum clearance. These houses are situated at Leavesden Green. Demolition of 122 slum dwellings is now completed following the inquiry of the Ministry of Health in 1933. Further schemes are under consideration for rehousing dwellers in slum areas, on sites near the centre of the town.

#### WELWYN GARDEN CITY.

- Water Supply . Adequate supply from boreholes in the middle chalk in the Mimram Valley ; whole district served except for few houses which have well supplies. Bulk supply given to the Rural District of Welwyn, also a supplementary supply to Knebworth. The Water Undertaking is owned and operated by the Urban District Council.
- Sewage Disposal . Public system for whole district except the village of Hatfield Hyde and about twenty outlying cottages. Disposal works are situated in the Black Fan Valley, and consist of detritus tanks, screening chambers, sedimentation tanks, and filters. Work on proposed extensions will commence shortly.
- Refuse Collection and Disposal. Collection once a week in covered motor vehicles and twice weekly from hotels, restaurants, and hospital. Dry refuse disposed of by strictly controlled tipping. Sec. 64 of the Welwyn Garden City Act, 1932, provides for all dwelling-houses to be provided with a regulation dustbin.
- Infectious Diseases . Arrangements made for admission of cases to Letchworth Isolation Hospital or Hertford and Ware Isolation Hospital ; swabs, etc., sent to the laboratory at Hill End Mental Hospital. Antitoxin kept at Cottage Hospital. No steam disinfectant for district ; clothing may be sent to Letchworth Hospital. Izal is supplied to



infected houses ; rooms disinfected with formalin candles and vapour.

Housing . . . During 1934 36 houses were erected by private enterprise.

*Rural Districts.*

ASHWELL.

Water Supply . . . Public supply to special Drainage District and few public pumps from deep well in chalk ; other sources of supply are deep wells, shallow wells, rain-water storage tanks, and ponds. The water supply for the special drainage district of Ashwell is to be extended to supply the village of Hinxworth. The Council have approved a comprehensive scheme to supply the parishes of Kelshall, Therfield, Reed, Barkway, Barley and Nuthampstead.

Sewage Disposal . . . Public service for Ashwell Special Drainage District only ; disposal works consist of two septic tanks and broad irrigation.

Refuse Collection and Disposal. . . An occasional collection of indestructible refuse has been made in the parish of Ashwell. It is anticipated that the direct collection as at present organized in the Hitchin Rural District will be extended to this area.

Infectious Diseases . . . Cases of infectious disease to Joint Isolation Hospital, which can only admit one disease, and elsewhere by arrangement. Steam disinfectant at Isolation Hospital, but only used for hospital purposes ; house disinfection by spraying and fumigation.

Housing . . . The Council have erected 112 dwelling-houses. Further housing activity has been held in abeyance pending the change over to Hitchin.

BARNET RURAL.

Water Supply . . . Adequate supply for greater part of district from Barnet District Gas and Water Co., Colne Valley Water Co., and a few houses served by the St. Albans Water Co. ; about half a dozen shallow wells

Sewage Disposal . . . Most of the developed part of district has public system. There are three disposal works at St. Catherine Bourne, Shenley, Tilehouse Farm, Boreham Wood, and Medburn Farm, Elstree. The two former have sedimentation tanks and percolating filters, and the latter has sedimentation tanks and treatment by broad irrigation. Parts of Watford Rural District and few houses in Borough of Hendon are served by the system.

Refuse Collection and Disposal. . . Weekly collection in most of the area, covered conveyance for large part. Largest portion of house refuse disposed of by controlled tipping.

Infectious Diseases . . . Cases of infectious disease to Barnet Joint Isolation Hospital ; swabs examined at Clinical Research Association. Antitoxin provided as required. Steam disinfectant at Isolation Hospital. Houses disinfected by formalin lamps or spray.

- Housing . . . A site of about 13 acres has been acquired, work of development is proceeding and tenders have been accepted for the erection of fifty houses.

## BERKHAMPSTEAD RURAL.

- Water Supply . . . Considerable part of district served by Great Berkhamstead Waterworks Co., Chiltern Hills Spring Co., and Ashridge Water Co. ; supply also obtained from private wells.
- Sewage Disposal . . . Public system for part of district. Cesspools and earth-closets. Sewage conveyed from Northchurch to Great Berkhamstead Disposal Works, where it is dealt with by septic tanks and percolating filters. Long Marston broad irrigation and Wilstone broad irrigation.
- Refuse Collection and Disposal. . . Weekly collection at Northchurch ; fortnightly, monthly, and two-monthly at other districts. Covered conveyance for Northchurch and Berkhamsted Rural Parish.
- Infectious Diseases . . . Cases of infectious disease sent to Aldbury Isolation Hospital. Examination of swabs provided for. Council pays for antitoxin obtained by medical practitioners. No steam disinfecter available ; houses disinfected by formalin lamp.
- Housing . . . . . Seventeen Council houses were erected in 1934, 10 at Little Gaddesden, 4 in Northchurch, and 3 in Long Marston.

## BUNTINGFORD RURAL.

- Water Supply . . . Buntingford, Aspenden, and Wallington have piped supplies. In other villages the sources of supply are deep and shallow wells.
- Sewage Disposal . . . Public system to part of district ; remainder of district has cesspools and pail-closets. Disposal works at south end of Buntingford ; treatment by broad irrigation after screening.
- Refuse Collection and Disposal. . . Weekly collection in covered conveyance for Buntingford town only. Quarterly collection of tins, etc. in other parishes. Refuse disposed by burning and dumping.
- Infectious Diseases . . . Cases sent to Buntingford Isolation Hospital ; swabs, etc., examined at laboratory at Hill End Mental Hospital. Diphtheria and tetanus antitoxin at office of Sanitary Inspector. There is a small disinfecter at the hospital. Houses disinfected by means of formaldehyde.
- Housing . . . . . At the present time 42 houses are in course of erection ; 36 houses will be commenced shortly.

## HADHAM RURAL.

- Water Supply . . . Public supply for Much Hadham and surrounding hamlets from deep well in chalk ; rest of district supplied by wells, many of which are deep wells. High Wych supplied by Herts and Essex Water Co.
- Sewage Disposal . . . Public system for parts of district ; disposal works at south end of Much Hadham, treatment by broad irrigation ; also at High Wych. Braughing (part of) has small irrigation area for slop water.



Refuse Collection and Disposal.	Weekly collection for Much Hadham (general) and for Braughing (tins only).
Infectious Diseases .	Cases to Joint Isolation Hospital at Bishop's Stortford ; swabs, etc., to laboratory at Hill End Mental Hospital. Antitoxin kept at Isolation Hospital. Steam disinfectant at Isolation Hospital, to which infected clothing is sent. Houses are disinfected by formaldehyde.
Housing . . .	Four houses contemplated.

## HATFIELD.

Water Supply .	Public supply for the greater part of the area from the mains of the Barnet District Gas and Water Co. and for Essendon from a bore at Essendon Mill, wells, springs and pumps in the rural areas. A new main has been extended to Northaw. There are also extensions of water mains to Mill Green and in School Lane, Essendon.
Sewage Disposal .	Public system of sewers for portions of the district ; elsewhere cesspools and pail closets. Disposal works at : Mill Green, Hatfield, Newgate Street Village, Welham Green, and Cuffley, consisting of settling tanks, bacteria beds, and humus tanks ; and at Littleheath, settling tanks, filter beds, and land treatment. The contracts for the sewerage of the Parish of North Mimms and the enlargement of the works at Welham Green have been let, and an early start is anticipated. The scheme for sewers and sewage disposal works at Essendon is completed and the work will be commenced early in the year. A new 15 inch trunk sewer is to be laid across the Birchwood Farm Estate, where extensive building operations are taking place. The new De Havilland Aircraft Works and surrounding district will be served by a new pumping station on the by-pass road which will pump the sewage to the head of the Birchwood sewer. Reports on the drainage of the following areas are in course of preparation : Northaw and Cuffley, Nast Hyde, and Stanborough. A report is also being prepared on the enlargement of the existing sewage disposal works at Hatfield.
Refuse Collection and Disposal.	Weekly collection generally ; twice weekly in some parts of Hatfield Town ; covered conveyances always used ; service being extended ; disposal by controlled tipping.
Infectious Diseases .	Cases sent by arrangement to Hertford and Ware Isolation Hospital ; examination of swabs paid for in necessitous cases ; antitoxin supplied where required ; no steam disinfection ; rooms and clothing are disinfected with formalin.
Housing . . .	The number of houses built in 1934 was 154, including 8 erected by the Council. A scheme for 80 houses on the Birchwood Estate is being prepared by the Council partly for the purpose of rehousing displaced persons from the slum areas to be cleared.

## HEMEL HEMPSTEAD RURAL.

- Water Supply . A considerable part of the district has a public supply from various sources, all from the chalk. Outlying portions have private wells and filtered rain-water.
- Sewage Disposal . Water carriage system for portions of the district cesspools, and earth-closets. Disposal works at King's Langley and Markyate, double or single filtration and percolating filters and Flamstead and Flaunden treatment by discharging on to land.
- Refuse Collection and Disposal. Weekly or fortnightly collection for most of district by mechanical and horse conveyances; disposal by controlled and partly controlled tipping.
- Infectious Diseases . Cases of infectious disease to Hemel Hempstead Isolation Hospital; swabs to Clinical Research Association; antitoxin kept at office of Sanitary Inspector; disinfectors at Isolation Hospital used when required; house disinfection by sanitary staff.
- Housing . . Four houses built by Local Authority during 1934; houses to be built in 1935 are 42: 20 in Rucklers Lane, 12 in Chipperfield, 6 in Flamstead, and 4 in Markyate.

## HERTFORD RURAL.

- Water Supply . Public supply for portions of district from tube well, Bayford, Welwyn R.D.C., Metropolitan Water Board, also private supplies and shallow wells.
- Sewage Disposal . Public system for parts of district. At Little Amwell and Aston open tanks, filters, and broad irrigation. At Walkern sedimentation tank and broad irrigation. At Tewin sedimentation tank and sub-irrigation. In other parts of district cesspools and earth-closets.
- Refuse Collection and Disposal. No collection except at Little Amwell. The rest of the district tins only are collected by the Parish Councils.
- Infectious Diseases . Cases to Hertford and Ware Isolation Hospital; swabs, etc., sent to laboratory at Hill End Mental Hospital; antitoxin kept at Isolation Hospital; steam disinfectors at Isolation Hospital; houses disinfected by formaldehyde.
- Housing . . Number of houses built during 1934, 18; in course of erection, 4; number contemplated, 40.

## HITCHIN RURAL.

- Water Supply . Public supply for ten districts in area; water in bulk being taken in some cases from Hitchin Urban District, Letchworth Garden City Co., and Stevenage Urban District. Considerable expense has been incurred during the recent drought in carting water to villages where the wells and springs have failed. Extensions to existing supplies have been made, or are in hand, including Pirton to Holwell, Ickleford to Cadwell, St. Ippollitts to Spurbury, Almshoe and



Preston Road, Breachwood Green to the Heath, Codicote to Welwyn Road, and Weston to Clothall. A new supply, borehole, power plant, storage tank, and mains have been provided at Peters Green. Work is also in hand for a piped supply for the Wymondleys, including duplicate bore-holes and power plant with storage tanks. This work is additional to the larger County scheme, by which it is proposed to supply the parishes of Offley, Lilley, Kings Walden, Kimp-ton, and St. Pauls Walden.

Sewage Disposal . Public system for more populous parts of districts ; nine small disposal works ; one privately owned. General method adopted is by settling tanks in alternate use and broad irrigation. The question of making provision for the parishes of Ickleford and Breachwood Green and Whitwell is under consideration.

Refuse Collection and Disposal. This service has been completely reorganized. A district collection by the Council's employees in a specially constructed motor vehicle is now in operation. Disposal by partly controlled tipping. There is a regular weekly collection of all household refuse in the parish of Knebworth, while indestructible refuse is collected once every four weeks from all other parishes in the district.

Infectious Diseases . Cases admitted to Joint Isolation Hospital ; swabs sent to County Public Health Laboratories ; antitoxin kept at Isolation Hospital ; steam disinfectant at hospital available when necessary. House disinfection carried out with formalin vapour.

Housing . . Clearance Orders have been confirmed in respect of seven areas, and preparations are well in hand for the erection of twenty-eight cottages to rehouse persons displaced from such areas, and from individual unfit houses.

#### ST. ALBANS RURAL.

Water Supply . . Public supply for greater portion of district from Harpenden Water Co., St. Albans Water Co., Barnet Water Co., Hatfield Water Co., Colne Valley Water Co., and public wells.

Sewage Disposal . Public system for parts of district ; public and private cesspools ; arrangements can be made for emptying cesspools. Sewage disposal works at Nast Hyde, London Colney, and Wheathampstead.

Refuse Collection and Disposal. Weekly collection in covered mechanical conveyance except in outlying districts. Disposal by controlled tipping.

Infectious Diseases . Cases of infectious disease to St. Albans Hospital ; swabs sent to Clinical Research Association and Hill End laboratory ; antitoxin supplied at Council's expense ; steam disinfectant at St. Albans Hospital ; house disinfection by sanitary staff.

Housing . . Houses erected by private enterprise, 414 ; Council houses erected : St. Peters 2 and Wheathampstead 34.

## WARE RURAL.

- Water Supply . Public supply from deep well in chalk for Wormley and Broxbourne; Great Amwell has a piped supply from the Met. W.B.; rest of district served by wells, mostly deep; a few houses in Hoddesdon are supplied. Consideration is being given to a comprehensive water scheme to serve the other parts of the district.
- Sewage Disposal . Public system for parts of the district; disposal works at Wormley, Broxbourne, and Stanstead Abbots; treatment by broad irrigation.
- Refuse Collection and Disposal. Weekly collection in covered mechanical conveyance in parts of district, bi-weekly collection of contents to pails; disposal by tipping.
- Infectious Diseases Cases sent to Joint Isolation Hospital; swabs to laboratory at Hill End Mental Hospital; steam disinfectant at Isolation Hospital; house disinfection by formaldehyde.
- Housing . . Twenty-four houses were built during 1933. No houses were built during 1934.

## WATFORD RURAL.

- Water Supply . Public supply for the whole of the district from Rickmansworth and Uxbridge Valley Water Co., Colne Valley Water Co., Watford Borough, and Hemel Hempstead Borough; few wells in isolated parts.
- Sewage Disposal . Public system for more populous parts of district; cesspools and earth-closets. There are a number of small sewage disposal works in the district, also sewage is dealt with at works in adjoining districts.
- Refuse Collection and Disposal. Generally weekly collection; in some districts fortnightly. The parishes of Aldenham and Abbots Langley have their own public cleansing services. The vehicles used throughout the district are satisfactory. Disposal by controlled tipping.
- Infectious Diseases . Cases of Infectious disease to Joint Hospital at Watford; swabs to Clinical Research Association; antitoxin kept at Council Offices. Steam disinfectant at Isolation Hospital; house disinfection carried out by Sanitary Inspector.
- Housing . . Total number of houses owned by Local Authority, 222.

## WELWYN RURAL.

- Water Supply . Public supply from Welwyn Garden City Company to parishes of Welwyn and Digswell. Small portion supplied by Hitchin Rural District Council. Welwyn Waterworks to be used for future extension; few wells. Arrangements have been made to lay water mains in Parish of Ayot St. Peter.
- Sewage Disposal . Public scheme for portion of parish of Welwyn; cesspools and earth-closets. The scheme of sewerage and sewage disposal for Woolmer



Green is now completed. Arrangements have been made for the first unit of the proposed new disposal plant to be constructed. This will consist of settling tank and filter and sludge drying bed, all in duplicate. When these works are completed the existing works close to Station Road will not normally be used.

Refuse Collection and Disposal.	Weekly collection generally in covered mechanical conveyance; disposal by controlled tipping. A new refuse tip has been commenced on strictly controlled system.
Infectious Diseases .	Cases of infectious disease are admitted by arrangement to the Letchworth or Hertford and Ware Isolation Hospitals; swabs sent to Hill End Mental Hospital laboratory; antitoxin kept at Cottage Hospital. There is no steam disinfectant, but articles are occasionally sent to the Isolation Hospitals for disinfection. Houses are disinfected with sulphur or formalin; disinfectant supplied in cases of tuberculosis.
Housing . . .	The Council have now erected a total of 210 houses and an additional 60 are in course of erection.

---

### *MILK PRODUCTION : SCHEME OF ACCREDITED PRODUCERS.*

In pursuance of "The Milk and Dairies (Amendment) Act, 1922", the Minister of Health has made an Order, the Milk (Special Designation) Order, 1923, prescribing the conditions subject to which licences may be granted. The authorities responsible for the issuing of licences under the above Order are as follows: (1) The Minister of Health, licences to producers of Certified and Grade "A" (tuberculin-tested) milk. Producers holding above licences from the Minister of Health will also be entitled to sell milk produced under such licence as Grade "A" milk without further licence from Local Authority; (2) County Councils and County Borough Councils, licences issued to producers of Grade "A" milk; (3) Sanitary Authorities, licences issued to distributors of Certified milk, Grade "A" milk, including Grade "A" tuberculin-tested and Grade "A" Pasteurized milk, and of "Pasteurized" milk. No licence from a Sanitary Authority is necessary in the case of a licensed producer who distributes milk directly to the consumers.

The question of the adoption of a scheme of accredited producers to secure an improved standard as regards purity of milk in the County has been considered by the County Council during the year. The scheme which was adopted by the County Council at their meeting held on 5th November, 1934, was not

accepted by the County Councils Association and further action was consequently postponed. The scheme provided for clinical examinations with necessary certificates as to results, certificates as to cleanliness of production, and suitability of premises, and the bacteriological examination of samples of milk for bacterial count, B. Coli and tubercle bacilli. The scheme now adopted by the County Council is the Accredited Producers Scheme for the production of Grade "A" milk, which came into force on 1st May, 1935. This scheme differs from the previous scheme as it does not at present provide for the examination of milk for tubercle bacilli, but this matter is receiving further consideration. An important point which is also being considered is the adoption of suitable arrangements for the examination of samples of milk imported into the County.

Reference may be here made to the scheme which has been adopted for the supply of milk at reduced cost to school children. Samples of such milk are examined for bacterial count, B. Coli, and tubercle bacilli, but it is only approved under the scheme if it conforms to grade standard, has no acid-fast bacilli, or is pasteurized under licence. One is impressed by the improvement in the standard of milk which has resulted from this scheme. Counts as low as 500 with absence of B. Coli have been obtained.

During the year 98 samples of Grade "A" milk were examined, and of this number 78 were up to standard and 20 were below standard. The corresponding numbers last year were 69, 58, and 11.

The following figures indicate the action which has been taken during the year under the "Milk and Dairies (Consolidation) Act, 1915": Number of animals examined, 31,690; number found to be suffering from tuberculosis, 37; number of samples examined, 247.

#### *DISPOSAL OF HOUSE-REFUSE: DUMPS.*

During the year special attention has been given to the methods adopted in the County for the collection and disposal of house refuse. The large refuse dumps at Cole Green and Blackbridge, Wheathampstead, which consist of imported refuse are under constant supervision. The disposal of refuse at these large dumps is now carried out in such a manner as to meet the conditions laid down by the Ministry of Health. These dumps as well as the smaller dumps are inspected regularly by Mr. Dubbin who has supplied me with the following particulars regarding the condition of the local dumps: Local Authorities, 36;



First-class controlled dumps, 14 ; second-class controlled dumps, 13 ; third-class, 3 ; 4 refuse disposal works ; remainder under alteration. Collection : direct 20 ; direct and contract 3 ; contract 8. A visit was paid to Brighton to see the method partly adopted there of disposing of refuse by slow combustion in separate brick compartments sunk in the ground. The method appears to be effective, the plant not too expensive, and the working costs comparatively small ; it is a system which would appear to be well adapted to the needs of small and medium-sized urban districts.

The precautions suggested by the Ministry of Health are as follows : (1) The deposit to be made in layers ; (2) no layer to exceed 6 feet in depth ; (3) each layer to be covered on all surfaces exposed to the air with at least 9 inches of earth, or other suitable substance, except a portion which may be allowed uncovered during the formation of the layer ; (4) no layer to be left uncovered for more than 72 hours from the time of deposit ; (5) sufficient screens or other suitable apparatus to be provided where necessary to prevent any paper or other debris from being blown by the wind away from the place of deposit.

#### SALE OF FOOD AND DRUGS ACTS.

The work under the Sale of Food and Drugs Acts is carried out by the Inspectors appointed for the purpose, working under the Chief Constable. Analysis of samples taken are made by the County Analyst, Dr. Bernard Dyer, of the Analytical Laboratory, 17 Great Tower Street, London, E.C., to whom I am indebted for the following report regarding the analytical work carried out during the year.

#### DR. DYER'S REPORT.

##### *" Food and Drugs (Adulteration) Act, 1928. "*

##### SUMMARY OF SAMPLES ANALYSED FROM 1ST JANUARY TO 31ST JANUARY, 1934.

	<i>Samples Analysed.</i>	<i>Samples Unsatisfactory.</i>
Milk . . . . .	476	49
Cream . . . . .	18	—
Butter . . . . .	47	—
Lard . . . . .	15	2
Shredded Suet . . . . .	2	—
Suet Flakes . . . . .	1	—
Brawn . . . . .	3	—
Minced Meat . . . . .	1	—
Pork Haslet . . . . .	1	—
Pork Pie . . . . .	1	—
Salmon Roll . . . . .	1	—
Salmon and Shrimp Paste . . . . .	1	—
Sausages . . . . .	9	2
Sausages, Preserved . . . . .	7	—
Almonds, Ground . . . . .	7	—
Arrowroot . . . . .	8	—
Baking Powder . . . . .	4	—

	<i>Samples Analysed.</i>	<i>Samples Unsatisfactory.</i>
Cocoa . . . . .	3	—
Coffee . . . . .	4	—
Coffee and Chicory . . . . .	1	—
Coffee and Chicory Essence . . . . .	1	—
Custard Powder . . . . .	1	—
Dessicated Coconut . . . . .	1	—
Egg Powder Substitute . . . . .	1	—
Lemonade Powder . . . . .	2	—
Milk Pudding Mixture . . . . .	1	—
Pearl Barley . . . . .	4	2
Rice . . . . .	4	—
Rice, ground . . . . .	1	—
Self-raising Flour . . . . .	6	—
Mincemeat . . . . .	5	—
Raisins . . . . .	2	—
Sultanas . . . . .	2	—
Indian Chutney . . . . .	1	—
Pickles . . . . .	1	—
Tomato Sauce . . . . .	2	—
Brandy Essence . . . . .	1	—
Ginger, ground . . . . .	7	—
Grape Fruit Flavour Powder . . . . .	1	—
Mint . . . . .	8	2
Mint Sauce . . . . .	1	—
Olive Oil . . . . .	5	—
Pepper . . . . .	8	—
Sage . . . . .	1	—
Thyme . . . . .	1	—
Vinegar . . . . .	2	—
Jam . . . . .	6	—
Jelly Marmalade . . . . .	1	—
Orange Curd . . . . .	1	—
Peas, Cooked . . . . .	1	—
Peas, Tinned . . . . .	2	—
Lime Juice Toffee . . . . .	1	—
Sweets . . . . .	2	—
Brandy . . . . .	1	—
Gin . . . . .	1	—
Rum . . . . .	1	—
Whisky . . . . .	21	3
Grape Fruit Squash . . . . .	3	—
Lemon Barley Water . . . . .	1	—
Lemon Squash . . . . .	8	—
Lemonade Crystals . . . . .	1	—
Lime Juice . . . . .	1	—
Lime Juice Cordial . . . . .	2	—
Lime Squash . . . . .	1	—
Wine, Blackcurrant—non-alcoholic . . . . .	1	—
Wine, Ginger—non-alcoholic . . . . .	4	—
Wine, Orange—non-alcoholic . . . . .	1	—
Wine, Raisin—alcoholic . . . . .	1	—
Aspirin . . . . .	2	—
Bicarbonate of Soda . . . . .	2	—
Camphorated Oil . . . . .	3	—
Carbonate of Magnesia . . . . .	1	—
Eucalyptus Oil . . . . .	1	—
“ Magnesia ” . . . . .	1	1
Sweet Spirit of Nitre . . . . .	1	—
	<hr/>	<hr/>
	753	61
“ Appeal to Cow ” Samples of milk . . . . .	11	
	<hr/>	
	764	



*Milk.*—Of the 49 samples of unsatisfactory milk 31 were deficient in fat to the extent of from 5 per cent to 30 per cent of the minimum quantity proper to natural milk as indicated in the Regulations, while 18 contained added water varying from 2 per cent to 25 per cent. One of these was also deficient in fat to the extent of 38 per cent.

Of the 11 "Appeal to Cow" samples of milk 3 contained less than the presumed minimum of fat. The deficiency in one case was only small; but in the other two cases was substantial. In each case the results achieved the object with which they were taken, namely, the exoneration of the vendor from suspicion of having subtracted cream from the milk before he sold it.

*Lard.*—The two unsatisfactory samples of lard were taken from the same vendor and from the same source of supply. The samples in both cases were purchased as lard, but were found on analysis to consist not of lard, but of what is sometimes described as "lard substitute", namely, a mixture of fat and oils mainly of vegetable origin, having the appearance and consistency of lard and likely to be mistaken for lard if handed to the purchaser in response to a request for that article. However wholesome and useful such substitutes may be they should be sold for what they are and not as lard.

*Sausages.*—Two samples of sausages, which were sold without any indication that they were "preserved", were found to contain sulphur dioxide but within the limits permissible, provided that due declaration be made by the vendors.

*Pearl Barley.*—Two samples of pearl barley were faced with 0.5 per cent of talc or steatite, and also afforded evidence of having been bleached with sulphur dioxide.

*Mint.*—Two samples of mint contained 15 per cent of dried leaves of ailanthus ("Tree of Heaven"). As has been mentioned in previous reports, a large foreign consignment of dried mint mixed with this adulterant found its way into the market some considerable time back and was (no doubt unwittingly) widely distributed over the country through various wholesale dealers. Although there is reason to suppose that the main portion of this has been withdrawn or disposed of, evidence of the adulteration is still met with, as in the case of the two samples now referred to, which were both contained in cartons packed by the same wholesale herbalists.

*Whisky.*—Three samples of whisky were deficient in alcoholic strength. The law requires that potable spirits should contain not less than 65 per cent of proof spirit, or, as it is more usually expressed, that they should show a strength of not more than

35 degrees below proof. One of the samples was 1·4 degrees below this minimum legal strength ; another sample was 3·9 degrees below legal strength ; while yet another was as much as 10 degrees below legal strength.

*Magnesia*.—It would appear either that the person who sold this “magnesia” was unaware of the meaning of “magnesia” or that he presumed a similar degree of ignorance on the part of the purchaser of the article ; for what was delivered was the preparation commonly and popularly known as “granular effervescing citrate of magnesia”, whereas magnesia itself is an alkaline powder consisting of magnesium oxide, its properties having little in common with the effervescing preparation referred to.

### SUMMARY AND CONCLUSIONS.

In summarizing this report reference should be made to certain matters to which special attention has been given by the various Committees of the County Council during the year.

Special attention has been given to the question of clean milk production. A scheme is in force to secure the supply of an improved standard of milk for school children at reduced cost. The Accredited Milk Producers Scheme for the production of Grade “A” milk has also been adopted as from May 1st, 1935.

In January the out-patient clinic at Hill End Hospital was opened. This clinic in conjunction with that in St. Albans is known as the St. Albans Nerve Clinic. The aim of the clinic is to serve as a diagnostic and consultation centre and to provide for treatment by psychotherapeutic methods of early and suspected cases of mental disorder. It is essentially preventive in its aim and emphasizes the importance of the well-known aphorism “Prevention is better than cure”.

The question of maternal mortality has been further considered during the year and a special report on the subject has been submitted. Further measures have been adopted with a view to reducing the number of deaths in child-birth. Further investigation has been carried out at the Wellhouse Hospital, Barnet, as to the induction of analgesia in labour by nitrous oxide and air, and this method has now been adopted in other maternity units in the County.

In certain of the Public Assistance Institutions additional accommodation of an up-to-date character has been provided, including a nursery on modern lines at Hitchin. The accommodation in sick and other wards has been increased by 112 beds.



Considerable progress has been made in the provision of improved water supplies in rural districts under the scheme initiated by the County Council.

During the year arrangements were made to provide for the immunization against diphtheria of young children attending the Infant Welfare Centres.

The new scheme for the provision of hospital accommodation for infectious diseases has been approved by the Ministry of Health.

Special attention has been directed to the question of refuse disposal in the County, and the Feoenix System of incineration adopted at Brighton has been inspected and reported upon.

The health of the County during 1934 has generally been good and with some few exceptions the statistics compare favourably with those of last year.

The estimated population of the County is given as 429,350, compared with 421,200 for 1933, representing an increase of 8,150.

There is a slight increase in the birth-rate, which was 13·8 compared with 13·6 last year. The actual number of births was 5,947 compared with 5,735 in the previous year.

There is a fall in the death-rate, which was 10·4 compared with 10·8 in 1933; the causes of this decrease are discussed in the body of the report.

There is a distinct fall in the infant mortality, which was 37 compared with 42 last year. In the rural districts the infant mortality reached the low figure of 33. The figure 37 is the lowest infant mortality which has so far been reached in the County, the previous lowest being 42.

There is unfortunately a slight increase in the maternal mortality, which was 3·6 compared with 3·4 for the previous year, the number of maternal deaths being 22, compared with 20 last year and 18 for 1932. It is somewhat remarkable that notwithstanding all that is being done to protect maternal life there is no progressive decrease in the number of deaths during childbirth. This question is further discussed in the section dealing with maternal mortality.

There is a decrease in the death-rate from pulmonary tuberculosis, namely 0·47 compared with 0·53. This is the lowest death-rate from pulmonary tuberculosis which has so far been reached in the county. In the rural districts the death-rate reached the low figure of 0·33.

There is an increase in the death-rate from cancer and other

forms of malignant disease, which was 1·6 compared with 1·3 last year. The number of deaths from this cause was 705 compared with 578 last year. The question of the increase in the death-rate from malignant disease is discussed in the section under that heading.

The number of patients from the County attending the Venereal Disease Clinics in London during the year has decreased, being 288 compared with 328 for 1933.

The death-rate from epidemic disease is practically the same as last year, namely 0·16 ; if taken to a further decimal figure it will be found to be slightly lower.

There was a considerable decrease in the number of deaths from influenza, pneumonia, bronchitis, and whooping-cough.

In conclusion I desire once more to express my thanks on behalf of the County Council to the ladies who act as voluntary workers at both the County Council and the Voluntary Maternity and Child Welfare Centres for the valuable assistance they give and to the time they devote to this important work. Some indication of the value of their work is to be seen in the low infant mortality recorded in 1934.

